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State needs in public school education for the hearing impaired and steps in the development of comprehensive state planning are presented along with recommendations of conference participants, a summary report, and models for regional planning, day programs, and the team approach. The interest of the Alexander Graham Bell Association and the U.S. Office of Education in day programs and the conference organization are explained. Following an introduction by Eleanor Vorce, topics discussed are the day care program in education by Ann M. Mulholland, organization and administration of a program at state and local levels by Charles W. Watson, demographic and economic criteria in establishing classes by James C. Chalfant, supervision at state and local levels by Hazel Bothwell, and supervision of classroom teachers by Evelyn M. Stahlem. Also included are Janet B. Hardy on early identification, Robert Frisina on diagnostic evaluation and placement, June Miller on admission criteria for day schools, and Mamie J. Jones on coordination of specialists in public school programs. Recommendations for research, a summary of group discussions, and conclusions are provided along with a preliminary conference report, conference program, list of participants, and a 21-item bibliography. (RP)

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NATIONAL RESEARCH CONFERENCE ON DAY PROGRAMS FOR HEARING IMPAIRED CHILDREN

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FINAL REPORT
of the
NATIONAL RESEARCH CONFERENCE ON DAY PROGRAMS FOR HEARING IMPAIRED CHILDREN

Lake Mohonk, New York

May 10-13, 1967

Ann M. Mulholland, Principal Investigator

George W. Fellendorf, Co-Principal Investigator

Under Grant #OEG 1-7-002540-2006 Awarded by the
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FINAL REPORT

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NATIONAL RESEARCH CONFERENCE ON DAY PROGRAMS FOR HEARING IMPAIRED CHILDREN

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
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PREFACE

The first National Research Conference on Day Programs for Hearing Impaired Children was held at Mountain House, Lake Mohonk, New York to consider the critical subject of the organization and administration of educational programs where the children return to their homes each night, rather than remain in residence. Educators of the deaf have long been concerned with the increase in the number of day classes for hearing impaired children throughout the United States, particularly when long-range plans for a total educational program are infrequently encountered. Thus, the Conference had as its objectives:

> Examination of the policies and practices of the various states in regard to the organization and administration of day programs for the hearing impaired in local school systems;
>
> Description of the administrative and organizational needs;
>
> Recommendations concerning how such needs could be met;
>
> Identification of areas of needed research; and
>
> Publication and dissemination of a report which might serve as a guideline for states in developing programs for the hearing impaired.

The sixty-five participants attending the Conference May 10-13, 1967 represented a variety of levels of responsibility and of professional experience in the identification, diagnosis, education, and habilitation of hearing impaired children. The conferees included educators of the hearing impaired from day schools, day classes, residential schools; state, county, local, and school supervisors; directors of university teacher preparation programs; audiologists; psychologists; medical specialists in pediatrics, otology, and public health; and staff members of the Department of Health, Education, and Welfare.

During the four plenary sessions nine papers were presented on issues basic to the organization and administration of day programs. Following each plenary session, small discussion groups of ten or twelve persons met to focus on the specific topic. Each discussion group had a permanent chairman, a recorder, a research specialist, and an assistant recorder. The participants moved from one group to another according to a prearranged schedule.

A short preliminary report was published one month following the Conference and distributed at professional meetings at the International Conference on Oral Education of the Deaf and by mail to state education departments. This final report includes the nine papers presented at the plenary sessions, the conclusions and recommendations evolving from the group discussions, and suggested surveys and studies in need of research to insure appropriate educational planning at regional, state, and local levels.

The accomplishments of the Conference result from the concerted effort of many persons. We commend the participants for their diligence and commitment in delineating the problems of day programs and for their cogent recommendations. We acknowledge with gratitude the cooperation of the principals and staffs of the schools visited in nine states across the country and of the directors of special education at state and local levels whose generosity in sharing administrative data, problems, and innovative approaches provided the content of the working papers distributed to the conferees prior to the Conference.

Special commendation is expressed to Dr. Leo Connor, Superintendent of the Lexington School for the Deaf, for his perceptiveness in identifying topics warranting further consideration during the final discussion period. Because of its interim nature within the conference, however, Dr. Connor's remarks have not been included. Also we are particularly grateful for encouragement and support given by Dr. James W. Moss, Director, Division of Research, and Dr. George Olshin, Chief Research Laboratories and Demonstration Branch, Division of Research, Bureau of Education of the Handicapped.

The production of this report has been facilitated by the efforts of Mrs. Pauline Jenson, our colleague in the Department of Special Education, Teachers College, Columbia University, who had the important responsibility of directing the doctoral students in the daily recording and reproduction of the discussions, of Dr. M. Leigh Rooke, who assisted in organizing and editing the Conference report, and of Dr. Diane Castle of the staff of the Alexander Graham Bell Association for the Deaf, who assisted in the preparations for the Conference.

The vital role of Conference Director was ably carried out by Miss Harriet Haskins of the Johns Hopkins University Hospital, to whom we are deeply indebted.

Ann M. Mulholland

George W. Fellendorf

March 31, 1968

PART I

A CHALLENGE TO THE STATES

Today our nation faces a crisis in the education of its hearing impaired children. Throughout the country, as the result of parental demand and professional recognition of their advantages, day programs for severely hearing impaired children have grown so that today more than 60 per cent of such children are attending day schools for the deaf, are entered as day pupils in residential schools, or are attending special classes for the deaf and hard of hearing in regular schools. The proliferation of day classes, frequently supervised by educators who are not knowledgeable in the field of deafness, staffed by ill-qualified teachers, and limited in educational opportunity, has aroused educators and parents alike. Few states have recognized the problems of educating hearing impaired children beyond narrow limits; fewer still have developed comprehensive state plans. Surprising to many is the fact that in a number of states, the responsibility for education of a majority of deaf children is not within the state department of education, but under another agency such as public welfare. The accelerated growth of day classes raises question of the various states' discharge of the responsibility for educating all of its children.

Concern for the education of hearing impaired children has been found increasingly at the national level. National effort is reflected in the support by the United States Office of Education of several conferences having much broader missions than that of the National Research Conference on Day Programs for Hearing Impaired Children. Consequently, their recommendations, which were focused on critical but general topics, were not directed to immediate problems of the states. The report of one conference, known as the Virginia Beach Conference on Teacher Preparation, while widely disseminated, has had little direct impact to date on the supply of qualified teachers or the quality of teacher preparation programs. On the other hand, the report has been helpful in highlighting the problems of teacher recruitment, and preparation, thus adding to the field of knowledge available to those planning future conferences and to those developing state educational plans for the hearing impaired.

In 1964 the Secretary of Health, Education, and Welfare, Anthony J. Celebrezze, appointed a highly competent committee of professionals and nonprofessionals under the chairmanship of Dr. Homer Babbidge, to study the status of the education of the deaf in the United States. The Committee submitted its report in 1965; it has already had and will continue to have an impact on the education of the hearing impaired. Among the recommendations already implemented is one calling for the Federal Government to offer a program of planning grants to be used to assist and to encourage the states to develop individual state plans for the education of the deaf, with a portion of the funds reserved to facilitate regional and interstate planning. Also, the Babbidge Report recommended that all state plans place leadership responsibility for the program of the education of the deaf in the department of state government having responsibility for general public education within the state. In addition to these directives to the states, the Babbidge Report recommended the appointment of an Executive Assistant to the Secretary who would advise on matters relating to the hearing impaired, consideration of a new technical institute for the deaf, and the convening of a national conference on education of the deaf to consider "effective ways to encourage the development of state plans for the coordination of comprehensive educational and corollary services for the deaf." 1/, 2/

The Elementary and Secondary Education Act (Public Law 89-10) has dramatically focused national attention on the educational needs of all children. Especially through its Title VI, ESEA has specifically helped the states to meet the problems of educating the handicapped child and adult through the normal public school systems.

Thus the Federal Government, through national studies and subsequent legislation, has both recommended and funded the planning of an aggressive attack on the needs of hearing impaired children. Recognizing the acuteness of the present problems the states face in educating hearing impaired children, the United States Office of Education funded the National Research Conference on Day Programs for Hearing Impaired Children to provide guidelines for state planning. The German measles epidemic of 1963-64 resulted in an enormous number of hearing impaired infants, and the complete effect of the epidemic is yet to be measured. Unquestionably the impact of that tragic episode, when added to the population growth, has already created a crisis for Federal, state, and local authorities concerned with the education of handicapped children.

This report of the National Research Conference on Day Programs for Hearing Impaired Children is addressed to every state governor, legislature, and department of education, for each has his share in the responsibility for providing the best possible education and educational setting for the hearing impaired children of his state. Developed by an outstanding group of authorities are recommendations which may be used as guidelines for initiating, improving, and expanding intra- and inter-state day programs for children who are educationally handicapped by a hearing loss.

1/ *Education of the Deaf: A Report to the Secretary of Health, Education, and Welfare by his Advisory Committee on Education of the Deaf.* Washington, D. C.: Government Printing Office, 1965. P. xix.

2/ Education of the Deaf: The Challenge and the Charge. A report of the National Conference on Education of the Deaf, Colorado Springs, Colorado, April 12-15, 1967.

Thus, the challenge has been given to each of the states. The professional educators have defined the problems and recommended solutions. The Federal Government has offered funds to prepare teachers, to plan programs, and to some extent, finance innovative ventures in education. Parents have demanded that their hearing impaired children be offered quality education in their local communities rather than be offered only one choice, state-supported residential institutions.

> How can a state organize to assure that its rapidly-increasing number of hearing impaired children will receive the best possible education within the framework of day programs?

The developmental steps which follow represent positive suggestions toward meeting the challenge!

SUGGESTED STEPS IN THE DEVELOPMENT OF COMPREHENSIVE STATE PLANNING*

1. The recognition by the Governor of the need for educational day programs for hearing impaired children and of the responsibility of the State Department of Education for meeting this need.

2. The establishment of an Advisory Committee on Education of the Hearing Impaired, which should be a permanent group to advise the Governor on long range comprehensive state planning and to reflect the public interest in this planning.

3. The appointment of a qualified and experienced educator of the hearing impaired as state coordinator, responsible for the education of hearing impaired children and youth and having authority to implement policies of the state department of education.

4. The acquisition and maintenance of demographic information on hearing impaired infants, children, and youth, including incidence, type, and degree of disability, and projection of the type and duration of needed educational services.

5. The organization of regional and local advisory committees to advise regional or local supervisors of education of the hearing impaired, and to cooperate with the Governor's Advisory Committee on Education of the Hearing Impaired.

6. The review of the role of state and private residential schools for the deaf with respect to their relationship to the state department of education and to day programs for hearing impaired children.

7. Assessment of the adequacy of existing services for hearing impaired children; such a review to include: staff, pupils, physical facilities, and special services.

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* These steps were selected from the group discussions and organized sequentially by the editors.

7.1 Staff

Number, qualifications, and professional affiliation of:

supervisors
supervising teachers
faculty
teaching aides
specialists in assessment and pupil personnel services
technical assistants maintaining auditory equipment
teacher-pupil ratio
supervisor-teacher ratio

7.2 Pupils

number
type and degree of hearing loss
additional handicapping conditions
grade placement
achievement levels

7.3 Physical facilities

location
transportation distance
acoustic equipment
library services

7.4 Special services

parental counseling and parent organization
educational diagnostic services
religious instruction
tutorial services for secondary school pupils
recreational
curriculum consultants
infant training program
medical and psychiatric consultative services
pupil personnel and vocational counseling

7.5 Line and staff relationships

transmittal of medical, psychological, educational information
admission
evaluations
referrals to other agencies

8. The immediate initiation of appropriate diagnostic facilities and instructional programs for multiply handicapped hearing impaired children. The epidemic of maternal rubella in 1963-1964 has made this a particularly urgent problem in many states.

9. Promotion of legislation and funds to provide for the following:

Census taking
Establishment and maintenance of a central registry
Compulsory hearing screening at the earliest age at which reliable techniques, facilities and staff are available
Cross funding between and within agencies and departments and across political boundaries
Extension of educational services with no legal minimal age
In-service training to upgrade teachers and supervisors in all classes and schools for the deaf and hard of hearing
Hearing aids appropriately selected and maintained

10. For implementation of these and other recommendations for state planning of educational programs for the hearing impaired, suggestions for qualified consultative services may be obtained from the Commissioner of Education, the Director of the Bureau of Education of the Handicapped, or the National Advisory Committee on Education of the Deaf, all of which may be reached at the Department of Health, Education, and Welfare, Washington, D. C.

RECOMMENDATIONS OF THE PARTICIPANTS

Based upon the working papers, the problems presented by the invited speakers and the experience of the participants, the following recommendations were made:

RECOMMENDATIONS	THE PROBLEM
AT STATE, REGIONAL AND LOCAL LEVELS	
1. The governor of each state receive a copy of the report of this National Research Conference on Day Programs for Hearing Impaired Children.	The urgency of the current situation in the education of hearing impaired children requires the energetic intervention of state government officials.
2. A permanent Advisory Committee composed of: the state coordinator of the hearing impaired; professional representatives of various types of educational programs for the hearing impaired; members of the medical profession, rehabilitation, health, and welfare agencies; the chairman of the Education Committee of the state legislature; knowledgeable laymen;	A comprehensive state plan for educating hearing impaired requires the coordinated effort of parents, professional groups, and public agencies. Diverse, duplicated services are uneconomical of the tax dollar and preclude quality education. Legislators respond to pressures of isolated groups sometimes compounding the problem.

RECOMMENDATIONS	THE PROBLEM
representatives of parent organizations of the hearing impaired; others essential to comprehensive services for the hearing impaired be appointed to advise the Governor of the adequacy and present needs of educational programs within the state and to recommend policies essential to a comprehensive state plan for the education of hearing impaired children and youth.	
3. The Advisory Committee assess the adequacy and long range needs of existing services for hearing impaired children; such a review to include staff, pupils, physical facilities, program and administrative structure:	Qualifications of teaching staff are minimal and vary from state to state. Few states have certification standards for supervising teachers or supervisors; advanced study in the education of the deaf is rarely required.
3.1 Staff	Teaching aides are often informally hired with little delineation of a requisite background.
3.11 Number, qualifications and professional affiliations of: Faculty Supervisors Supervising teachers Teaching aides Specialists in assessment and pupil personnel services Technical assistants maintaining auditory equipment	Specialists in pupil personnel services are generally unfamiliar with deafness yet critical decisions are based on their evaluations. Although most schools have expensive auditory equipment, few have trained technicians to provide calibration and maintenance.
3.12 Teacher-pupil ratio	Frequently ratios are determined independent of the age, educational level, and auditory impairment of the children.

RECOMMENDATIONS	THE PROBLEM
3.13 Supervisor-teacher ratio	There are no state or local criteria for the optimal ratio of teachers to supervisors within a school.
3.2 Pupils	
3.21 Number	In the preconference survey only 39 of the states and territories could submit a figure for the number of hearing impaired children enrolled for the academic years 1966-67. Some state departments of education did not include the enrollment of private schools within their state although they paid tuition for a number of residents attending such schools.
3.22 Type and degree of hearing loss	Although proper educational planning requires that classroom teachers have knowledge about each child's hearing loss as well as pertinent information about hearing aids, this information is frequently not transmitted to the classroom teacher and remains in the health records.
3.23 Additional handicapping conditions	Hearing impaired children often have additional learning problems. Appropriate placement and programming is often based on such information from medical and psychological records but is not routinely available.
3.24 Grade placement	Multi-graded classes for hearing impaired children in some states include a range of 4-5 grades and may complicate the learning-teaching process.
3.25 Achievement levels	Standards of achievement may be unrealistic when applied without due consideration of the effect of the hearing handicap.
3.3 Physical Facilities	Single classes may be found in a variety of types of settings: churches, halls,

RECOMMENDATIONS	THE PROBLEM
3.31 Location	clinics, hospitals etc., as well as in schools and, when located in schools, often must move as normal programs expand.
3.32 Transportation distance	Unrealistic demands may require even three year old children to travel distances one and a half hours each way.
3.33 Acoustic equipment	If present, is frequently in disrepair or inadequate to meet the children's needs.
3.34 Acoustic conditions	Inadequate acoustic treatment of classrooms and interference of lighting systems may actually hinder the development of oral skills.
3.35 Library and audio-visual services	Visual aids to instruction made available by the Federal government may be unknown to the school. Both pupil and professional libraries are necessary adjuncts to teaching facilities.
3.4 Program* Educational diagnostic services Parental counseling and parent organization Infant training program Nursery program Elementary school Secondary school	Lack of a long range comprehensive program for hearing impaired children and young adults restricts their educational and vocational opportunities; thus, their potential may never be attained. Education for the hearing impaired child begins with infant training and is one of the responsibilities of the school. The critical age for beginning language instruction of deaf children is under 4 years of age. Many state boards of education fail to accept this responsibility and limit compulsory education to an entrance age of 5-6.

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* This survey is not intended to include detailed curriculum evaluation; standards for curriculum will be the subject of a separate report if Recommendation #35 is acted upon.

RECOMMENDATIONS	THE PROBLEM
Tutorial services for pupils enrolled in secondary schools for the normally hearing	
Curriculum consultants	
Recreational activities	
Religious instruction	
Medical and psychiatric consultative services	
Personal and vocational counseling	
Adult education	
3.5 Administrative Structure	When there is no unified responsibility for management of hearing impaired children, a child can be refused admission from one program, excluded from another, accepted in a third which may be inappropriate to his needs and thus become an educational "drifter" with no systematic follow-up to evaluate his progress in the program in which he ends up.
Referrals to other agencies	
Transmittal of medical, psychological, and educational information	Some state boards of health having records of hearing impaired children may not legally transmit this information to schools and to state departments of special education. Critical medical and audiological reports may not reach the classroom teacher. Medical information is usually restricted to school medical files and unavailable to teachers.
Admission	Admission criteria are commonly based on level of hearing loss reported in dB

RECOMMENDATIONS	THE PROBLEM
	and an IQ figure without mention of multiple handicaps and other pertinent factors.
	Extremes vary from vagueness to rigidity.
Evaluations	Children are commonly placed in programs without indication of social, emotional, or linguistic developmental status.
Available facility for integration	Without proximity to schools for the normally hearing flexible integration policies are difficult if not impossible to develop.
4. The Advisory Committee insure that responsibility for the education of the hearing impaired, whether public or private, day or residential, rest in the state department of education, in order to provide essential and comprehensive educational services.	Education of hearing impaired children may be under the supervision of 5 or 6 different agencies within a given state—not under the state department of education.
5. The Advisory Committee inform the public of the needs and opportunities available to the hearing impaired.	The public, general educators, and medical personnel are frequently unaware of the educational services offered to the hearing impaired.
6. The Advisory Committee consider innovative means of facilitating communication such as telecommunication, videotape, etc., intra-state and inter-state in the discharge of their responsibility. Newer methods of communication might increase the efficiency and speed of decision-making in developing a comprehensive state program.	Decision-making by the Advisory Committee is often needlessly deferred for lack of face to face meetings.
7. The Advisory Committee consider the possibility of a reorganization of day programs	

RECOMMENDATIONS	THE PROBLEM
and day schools within the state through the formation of regional programs crossing state lines where feasible. Demographic and economic base criteria using Chalfant's Expectancy Index technique should result in improved organization on a regional basis and increased educational services for hearing impaired children.	
8. A state coordinator be appointed in the state department of education with authority delegated to that position to carry out proposed policies in the comprehensive state plan. It is a basic responsibility of the supervisor to develop and to implement state plans to educate the hearing impaired child.	The success of a comprehensive state plan is primarily based in the person having the authority to carry out the responsibilities of the state supervisory role. For states to reimburse communities for teachers' salaries and for tuition in private and public schools without having the authority to set standards and to enforce them reflects disregard for the interests of the public and of the hearing impaired child.
9. The responsibilities of the state coordinator include: the development and implementation of a comprehensive state plan for the hearing impaired in conjunction with the Governor's Advisory Committee and in cooperation with state and local educators provision for obtaining and maintaining demographic information as a basis for sound planning evaluation and re-evaluation of programs for the deaf and hard of hearing	At the time of this conference only 8 states had coordinators or state supervisors whose sole responsibility was the education of the hearing impaired; one of these states had two state supervisors.

RECOMMENDATIONS THE PROBLEM

coordination of regional and local programs through the supervisors of such programs

stimulation of innovative and experimental programs; including itinerant teachers, regional educational centers, transportation, technological aids, and teaching aides

development of in-service education programs with emphasis on the application and dissemination of research findings: educational, technological, behavioral

facilitation of effective curriculum development, instructional materials, and techniques of equipment evaluation

encouragement of organized parent involvement

interpretation of the state program to the general public

facilitating the formation of a state chapter of a national professional organization of educators of the hearing impaired

maintaining communication with university personnel preparing teachers of the hearing impaired within the state and at the national level

participating actively in teacher recruitment

supporting legislative action with expert witness

RECOMMENDATIONS	THE PROBLEM
10. Qualifications of the state coordinator include: qualified and successful experience in the education of the deaf appropriate educational background in general education and in the education of the deaf minimum of an earned master's degree general knowledge of other disability areas ability to understand and to communicate with a variety of pertinent disciplines, institutions of higher learning, and interested groups and organizations	Since only 16% of states have a coordinator for educational programs for the hearing impaired, the majority of persons having responsibility at the state level cannot provide the leadership necessary for the development of a quality educational program
11. Regional Advisory Committee be appointed composed of professionals and knowledgeable laymen to implement policies of the Governor's Advisory Committee and to recommend policy related to the operation of a regional program for the hearing impaired. Inter-state, inter-community planning for joint education, resource, and research programs will facilitate coordination of effort and may be more economical.	Lack of communication, hence understanding, precludes innovative organization.
12. Educational regions be established for program implementation based upon feasible	

RECOMMENDATIONS	THE PROBLEM
transportation areas, the nature and extent of the population to be served, the facility requirements, and availability of qualified staff.	
13. Regional supervisors be appointed who are responsible to the state coordinator of education of the hearing impaired.	Inadequate census information prevents prediction of educational needs: facility, staff, services, etc., both regionally and locally.
14. The duties of the regional supervisor include: program development and evaluation recruitment and staffing in-service education and demonstration teaching materials development and equipment evaluation educational diagnosis, placement and periodic evaluation of pupils data gathering coordination of services within the region stimulation of techniques of diagnostic teaching develop in conjunction with the state coordinator flexible pupil-teacher ratios supervision of instruction	Little empirical evidence has been gathered for supervisors to evaluate programs and to improve instruction.
15. Local Advisory Committees be appointed composed of professionals and laymen to effect	Lack of participation by educators of the hearing impaired in local planning with laymen can create misunderstanding of

RECOMMENDATIONS	THE PROBLEM
program development and modification.	the cost of specialized instruction and restricts the development of strong educational programs.
16. A qualified educator of the deaf, having the educational background and teaching experience be appointed to serve as local supervisor.	Supervision locally by administrators having little knowledge or understanding of the problems of educating children with hearing loss has weakened potentially strong programs.
17. Duties and responsibilities of the local supervisor include: supervision of instruction stimulation of techniques of diagnostic teaching coordination of services with local, regional, and state authorities participation in educational diagnosis, screening, and re-evaluation of pupils data gathering educational placement both initially and following re-evaluation development of a profile for each pupil including medical, educational, audiological, and ancillary information from public and private organizations providing diagnosis and treatment follow-up of hearing impaired pupils integrated into the schools for normals with or	

RECOMMENDATIONS	THE PROBLEM
without resource teachers follow-up of pupils excluded or graduated from the programs	
IDENTIFICATION	
The comprehensive state plan should include provisions for:	
18. Establishment of identification procedures at the earliest possible age with information on: medical evaluation current educational problem educational diagnosis and prognosis recommendation for continuing evaluation of progress with the educator of the deaf having an important role on the diagnostic team.	There is no comprehensive program in the United States for identifying hearing impaired infants and children. The present great increase in the number of hearing impaired children, the result of the 1963-64 epidemic of maternal rubella, is still untallied though estimated at 12,000. Proper compulsory identification would have alerted authorities to this sudden influx of at least five times the normal annual rate and enabled them to prepare for the education of these children for whom there are few facilities available now.
19. Development of a central registry which will provide standard recording procedures compatible with electronic storage and retrieval systems for accessibility of information for state planning.	Mobility of population necessitates sharing information and intelligent pre-planning. Projected state needs depend upon accurate expected enrollments, yet many states have no such information.
20. Exploration of the feasibility of using mobile units for diagnostic services and parental counseling; such service to be the responsibility of the state coordinator.	

RECOMMENDATIONS	THE PROBLEM
EDUCATIONAL DIAGNOSTIC CENTERS	
21. Establishment of regional educational diagnostic centers where a qualified diagnostic team including medical and audiological personnel and educators of the hearing impaired function as a team to evaluate and re-evaluate each hearing impaired child annually.	Diagnosis of hearing impaired children does not include only audiological evaluation, but total behavior and functioning. Educational diagnosis and diagnostic teaching are basic to the planning for a given child; many programs have no provision for such services on a regular basis.
22. Educational placement of children with hearing loss be the function of a team approach with the educator of the deaf having a major role in decision-making.	Few centers making educational recommendations have a qualified educator of the deaf on the team.
23. Educational placement be based on the child's status and potential as well as the availability of services.	Unrealistic placement of hearing impaired children in schools for the normally hearing before the child attains the level of linguistic and communication competency needed can result in academic retardation and reduce his potential.
24. Diagnostic evaluation and re-evaluation of children with hearing loss, either stable or fluctuating, be provided annually or biennially.	The school placement of many children is not periodically and systematically reviewed.
25. An important responsibility of the diagnostic team is to determine the primary handicap in those children who are multiply handicapped and that educational placement and programming be made accordingly.	Frequently educational placement and programming for multiply handicapped children is made without first establishing the primary handicap thus compounding the problem and further confusing the parents.
ADMISSION CRITERIA	
26. A state-wide policy of admissions be established within the	Schools and programs often arbitrarily exclude children regardless of stated policy.

RECOMMENDATIONS	THE PROBLEM
states and regionally to provide adequate facilities for educating hearing impaired children.	
27. Admission to a program for hearing impaired children be based first upon medical determination of irreversible hearing loss of a degree to be educationally significant and to require special education services.	
28. No legal minimal age limit be set for the educational programming for hearing impaired children.	Traditionally the public responsibility for education of children begins at age 4 or 5. For hearing impaired children, this is far too late.
COORDINATION OF SERVICES	
29. Department of education specialists with the state supervisor of the hearing impaired be made available to areas of the state needing assistance in the establishment of or strengthening of a program including working in the local program as long as the need exists.	
30. Reassessment of programs for the hearing impaired be undertaken based upon the learning process and different models of learning with subsequent redefinition of the roles of teaching personnel responsible for individual tutoring, small group instruction, programmed learning, large group activities; in essence, diagnostic teaching.	Few university programs prepare teachers of the hearing impaired for diagnostic teaching.

RECOMMENDATIONS	THE PROBLEM
LEGISLATION	
31. Legislation be initiated including funding where necessary in the states to provide:	
31.1 Census of the hearing impaired	
31.2 Establishment and maintenance of a central registry	
31.3 Compulsory hearing screening at the earliest age at which reliable techniques, facilities and qualified staff are available	
31.4 Cross-funding between and within agencies and departments and across political and geographical boundaries	
31.5 Extension of educational services with no legal minimal age established	
31.6 In-service training to upgrade teachers and supervisors of classes and schools for the deaf and hard of hearing	
31.7 Individual hearing aids appropriately selected and maintained	The delay in fitting, repairing, and reissuing hearing aids retards the child's academic progress.
31.8 A system of reimbursable units be established in computing state aid to programs for multiply handicapped children based on the complexity of the child's handicaps. To encourage the development of programs for the multiply handicapped child with a	Multiply handicapped children are frequently arbitrarily excluded from programs.

hearing loss, a unit per handicap would provide funds for development

AT THE NATIONAL LEVEL

32. A consistent policy for annual or biennial general medical, otological, pediatric, audiological, ophthalmological, and educational evaluation of all children with hearing losses be established and the results reported to a central registry.

33. A national model having the necessary flexibility to respect reasonable differences among and within the fifty states be developed for the coordination of services to the hearing impaired.

34. A single national professional organization for educators of the hearing impaired be established with state affiliates among whose responsibilities would be the definition of standards for the professional qualifications of teachers, supervisors, supervising teachers, and administrators and the development of standards for educational programs for hearing impaired children.

35. The series of proposed National Research Conferences on Day Programs be continued with the following priority:

a. Curriculum and Educational Technology

b. Inter-agency Cooperation

c. Role of the Parents

with particular emphasis on the infant, nursery age group.

There are no generally available and/or accepted curriculum guidelines, models of inter-agency cooperation or parent participation. Without some such material day programs may continue to develop as in the past and seriously reduce the opportunities for success.

SUMMARY REPORT:
NATIONAL RESEARCH CONFERENCE ON DAY PROGRAMS FOR HEARING IMPAIRED CHILDREN

Harriet Green Kopp, Ph.D.*

Our assigned task has been to confer on day programs for hearing impaired children. As a participant, I have been delighted by the productivity of the working groups; as a summarizer, I am appalled. The nature of our discussions may have been influenced to some degree by the wide variety of professional preparation and professional roles represented. Perhaps we were not as representative as we might have desired with respect to geographic distribution. However, selection of participants is always a difficult task. The regression coefficient of group interaction potentials is an unknown quantity to those who try to select the chosen few who will strike sparks that result in more fire than smoke. Once the conferees have come together, it becomes their conference. The Planning Committee no longer exercises control over the discussions or the conclusions. In summarizing, I have carefully reviewed both the recorders' notes and my own, in an attempt to arrive at an integrated presentation of your deliberations and to reflect the tone of the conference.

The particularly apt selection of chairmen, recorders, and research specialists by this Planning Committee made it possible for the work groups to function with unprecedented lack of backing and filling. The speed with which the discussions moved to specific consideration of problem areas and the avoidance of perseverative definition of issues is a compliment to the conferees as well as their leaders.

The pre-conference Planning Committee, the investigators, Miss Mulholland, Mr. Fellendorf and the conference director, Miss Haskins, showed an organizing aptitude which should commend them to those who may once again, in the far-far future, experience the urge to confer. I suspect that their skill is most evident in the expertise with which the conference staff and the assistant recorders have been bludgeoned into the frenetic activity basic to the smooth flow of conference materials, visual aids, and social hours. From past experiences, I can testify that this slave labor is seldom done by elves — not even at Lake Mohonk. It was a great pleasure to have fellow professionals available in these reinforcing roles.

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* Dr. Kopp is principal of the Detroit Day School for the Deaf.

Dr. Moss' mandate to discard old issues and to seek out new points of departure, focused our attention upon where we are going rather than where we've been. It would not be fruitful to attempt to replicate the discussion summaries offered by the chairmen, recorders, and researchers. It may be helpful to review briefly, some recommendations that were common to the five work groups. Researchable topics will become evident to the research specialists and the editors as they review the recorders' notes. In general, they appeared as recommendations rather than as specific research proposals, and perhaps this is as it should be.

The participants recognized the urgent need for evaluation of the ways in which we organize to serve the hearing impaired. Although discussion focused on the day program, it was evident that the role of the residential school is necessarily affected by changes in the role of the day school. The increase in population of day students attending residential schools was noted as a desirable trend, although it tends to complicate the administrative picture.

In general, the states recognize their responsibility for provision of educational services to all hearing impaired children. The conferees made strong recommendations in all of the work groups that this responsibility be met through careful scrutiny of existing programs and the development of state plans to meet present and projected needs. Concern for quality was evident in the insistence upon planning for more effective use of existing services, personnel, agencies, and funds. However, it was pointed out by all groups that while such planning should be coordinated at the state level, it must be based upon regional needs and the distribution and nature of the hearing impaired population. Diverse programs may be required within a single state.

The liabilities of small day class programs were considered to outweigh their assets. Consolidation of such programs was urged wherever feasible through extended use of transportation and through regional planning that transcends political boundaries. Model I of such interstate planning is included as illustrative of one type of consolidated plan. Various mechanisms were proposed by which such regional planning might be facilitated. In general, there appeared to be agreement that there was insufficient research data available to permit a definitive statement of minimal effective school size, age and defect range, and maximal transportation time. Experience dictates certain base criteria upon which present programming could proceed prior to the formulation of such data.

The day school region was viewed as ranging from a single urban area to an interstate facility. The apolitical nature of the region was emphasized.

It was viewed rather as an entity based upon transportation feasibility and density of the hearing impaired population. Replication of Chalfant's study of demographic and economic criteria was suggested to provide data pertinent to such planning.

The conferees were not overwhelmed by the number and complexity of the variables upon which each plan must be based. The highly individual nature of such plans was recognized. However, it was suggested that model regional programs were desirable to serve as stimuli in encouraging development of local plans to meet local needs. There was significant emphasis by the participants on the need for development of model programs in the areas of coordination of services, comprehensive school programs, diagnostic and evaluative services, as well as in the development of regional day programs. I have taken the liberty of preparing a model of a comprehensive day school program. (Model II: Comprehensive Day Programs for Hearing Impaired.)

Problems of the multiply handicapped deaf were discussed at some length. The increase in this population resulting from the recent rubella epidemic provides an opportunity now for planning to meet anticipated needs. The group accepted the responsibility for service to the multiply handicapped deaf and suggested that state plans must be developed to serve this population within the framework of the Department of Education. Such students are included in the suggested Comprehensive Day School model.

Both flexibility of program and the involvement of a number of professional disciplines will be required by this population. It was suggested that a unitary system of state reimbursement for the education of such individuals might facilitate the development of superior programs. In the case of multiply handicapped children, each handicap could be considered as a reimbursable unit. Thus, a cerebral palsied, mentally retarded, hearing impaired student would qualify for three units and would constitute a financial asset to the school system rather than a liability. It might become feasible to extend effective day school services to such students by reducing class size and increasing needed ancillary and supportive services. Optimal service to these complex individuals requires skillful liaison of appropriate professional services by the coordinating supervisor.

The role of the supervisor was considered as a critical and essential determinant of the success of the educational program. The state supervisor of programs for the hearing impaired was viewed as the individual with basic responsibility for the development and implementation of state plans. A high level of professional preparation in the area of the education of the deaf and a broad base of successful experience in such programs was considered to be a basic requirement for this position. Knowledge of other disability areas and skill both in relating to other professional disciplines and in the particular tasks defined by the groups as supervision were considered to be significant.

Such an individual would react with sensitivity to the recommendations of state and regional advisory boards and of regional supervisors. The skill with which designated authority is handled by the state supervisor is a basic determinant of the effectiveness of state planning, limited or advanced by the philosophy indigenous to the state. Such philosophy may be altered by the availability of Title VI funds for state planning.

The regional supervisor of programs for the hearing impaired also was viewed as requiring a high level of professional preparation in the education of the deaf, experience in educational programs for the deaf, and preparation in the knowledges and abilities related to supervisory tasks. A significant gap area was identified in the lack of adequate supervision at all levels. Strong recommendations were made that programs for preparation of supervisors be undertaken on an in-service and internship basis, and that this professional specialization be recognized as a critical area by those preparing educators of the deaf.

For too long we have been satisfied with inadequately prepared administrators of programs for the hearing impaired, and the education of our children reflects it. Education of administrators has not in general given them the academic knowledge derived from rigorous courses in learning theory, learning disabilities, social psychology, growth and development, speech science and phonetics, audiology, and linguistics. They often have come the route of predigested pap in generalized courses in communication skills and methods without theoretical and academic base. The education of deaf children is a direct function of the preparation of our leaders. As professionals we should no longer tolerate this condition. Perhaps here, too, we see one reason for the tremendous lag in the practical, functional application of research findings to systems of education, to remediation of learning disabilities, and to assessment procedures. It is not possible for an administrator to be concerned with cognitive style, with input-output systems, and storage and retrieval modes if he is trained rather than prepared. If his background is in the general area of educational administration, rather than in the disciplines relevant to the education of the deaf, he is more likely to be concerned with the qualities of non-slip wax and the thermal range of the pool than with cognitive ability and skills, to escape to public relations rather than to struggle with curriculum.

The necessity of early identification of the hearing impaired was reaffirmed. A number of recommendations emphasized the necessity of developing a means of identifying the hearing impaired population on a wide regional or national basis and of periodic monitoring of the extent to which each case is served. It is of little value to identify cases unless appropriate programming is made available. Mobility of families as they are attracted by on-going programs of education or are relocated by industry or by government agencies, was recognized as a serious problem with complex financial and socio-educational effects on afflicted schools which require comprehensive study by Federal agencies.

Admission criteria were viewed as too often reflecting arbitrary predetermined standards and serving as de facto exclusion criteria. It was suggested that such criteria might be developed in terms of the population needs of the region under consideration and must be susceptible to change in accord with population shifts. This was suggested as a significant researchable area within each region for predictive purposes in program planning and in preparation and recruitment of personnel on the basis of predicted need.

Concern was expressed for the development of effective plans for mandatory periodic re-evaluation of students in terms of social, psychological, academic, communicative, audiological, and physical aspects. The significance of evaluation at any period of need as determined by a member of the assessment team was stressed, but the importance of longitudinal evaluation studies also was emphasized. (Model III: Team Approach to Longitudinal Evaluation) The development of evaluative modes and techniques was recommended as a gap area in urgent need of research.

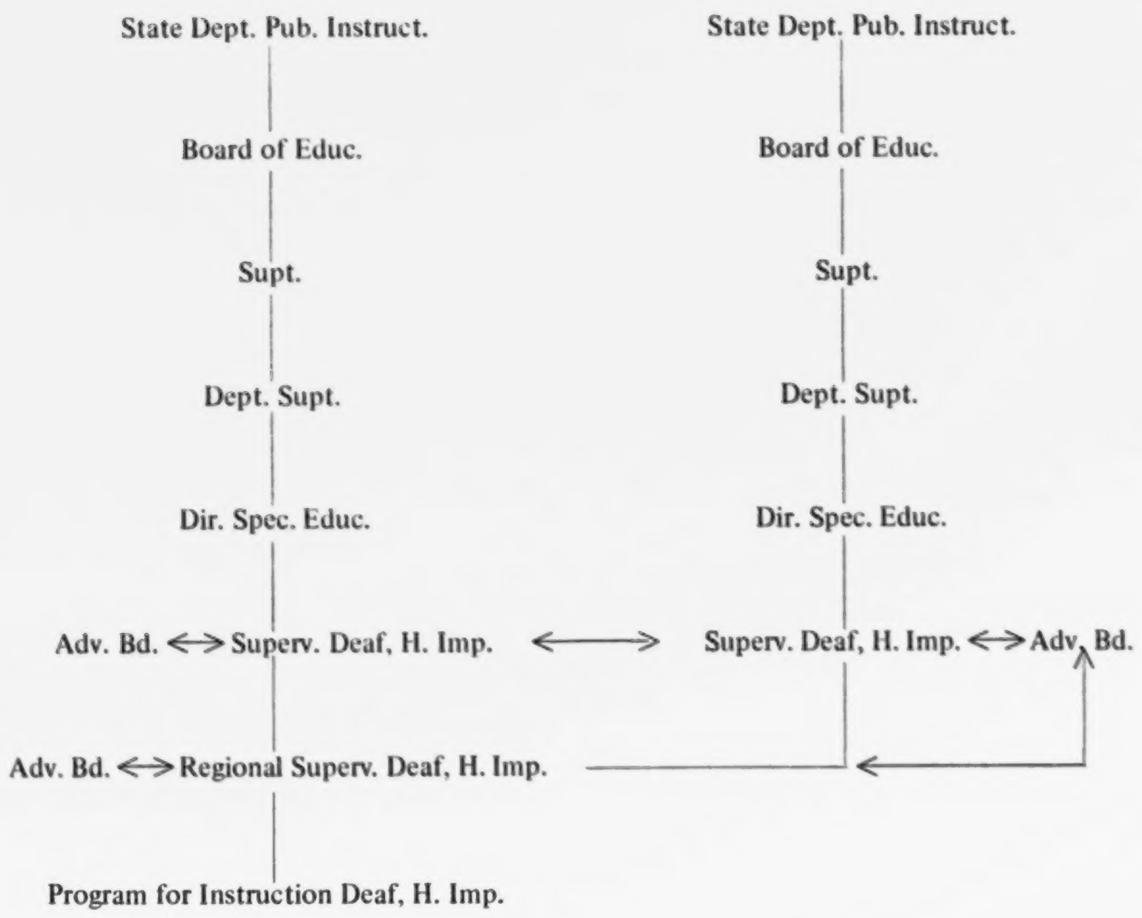
The conferees urged that legislation make early education of the hearing impaired mandatory, rather than permissive. They recognized the necessity of supportive data derived from research into the educational values derived from such programs. Such data are not now generally available.

A recommendation was made that consideration be given to the development of a national professional organization of educators of the deaf who would work toward the definition of standards for the professional qualifications of teachers, supervisors and administrators, and toward the development of standards for programs.

The participants, in the course of their deliberations, recommended a number of significant areas in which research is of prime concern. It is hoped that the proceedings will be of interest to those engaged in research. Our dedication to the task was evident in the vigor with which we pursued our discussions. We must now proceed to the more difficult task of implementing the recommendations which we have proposed.

Model I

REGIONAL PLANNING PROGRAM


State Dept. Pub. Instruct.
Board of Educ.
Supt.
Dept. Supt.
Dir. Spec. Educ.
Adv. Bd.
Superv. Deaf, H. Imp.
Adv. Bd.
Regional Superv. Deaf, H. Imp.
Program for Instruction Deaf, H. Imp.
State Dept. Pub. Instruct.
Board of Educ.
Supt.
Dept. Supt.
Dir. Spec. Educ.
Superv. Deaf, H. Imp.
Adv. Bd.

Model II

COMPREHENSIVE DAY PROGRAMS FOR HEARING IMPAIRED

Identification *Referral* *Prevention*

SERVICES REQUIRED

Assessment
- initial
- longitudinal

Organiz. + Adminis.

Placement

Couns. + Guid.

PROBLEM

deaf

org. br. dam.

hearing impaired

m.r.
- educ. m.r.
- train m.r.

em. dist.

prim. lang. disord.

orthopedic handicap

vision handicap

EDUCATIONAL FACILITY

resid. schl.

day schl. (large)

day schl. (small)

day class (segreg.)

day class (integr.)

hear. schl. supportive service

itiner. tchr.

consult.

EDUCATIONAL LEVEL

infant teaching

diagnostic teaching

3-5

- parent program
- home teaching
- clinical teaching

primary

sec.

post sec.

voc. rehab.

- assessment counseling
- work placement

custodial welfare

AGENCIES INVOLVED

family

community agencies

medical services

govt. agencies local, state, fed.

educ. services

Model III

TEAM APPROACH –
SHIFTING ROLE OF COORDINATOR IN LONGITUDINAL EVALUATION

LEVEL I

case identification – screening – risk registry – census

eval. team – med., educ., social, audiol., other prof.

Coordinator – Pub. Health + Audiologist

LEVEL II

diagnosis – evaluation – referral – placement – re-evaluation

eval. team – med., educ., social, psych., audiol., other prof.

Coordinator – Educator

LEVEL III

evaluation – referral – placement – counseling – re-evaluation

team – audiol., voc. rehab., educ., social, psych., med., other prof.

Coordinator – Voc. Rehab.

PART II

ALEXANDER GRAHAM BELL ASSOCIATION FOR THE DEAF INTEREST IN DAY PROGRAMS

George W. Fellendorf*

This is not going to be a long address, but I thought it would be worthwhile to mention briefly why the Alexander Graham Bell Association for the Deaf is involved in a meeting on this particular subject.

The Bell Association is made up of a number of people with different backgrounds and different reasons for being members. Many of you here at Lake Mohonk are members of this Association. But there is also another category not represented here, and that is the large number of parents of deaf children, who constitute the second largest category of members of the Bell Association after the category of professional teachers. The Alexander Graham Bell Association for the Deaf was founded as an information center, and secondly, to encourage and promote the teaching of speech, lipreading, and the use of residual hearing to deaf children. By giving deaf children oral skills with which they can express their thoughts, we believe we are offering the best possible preparation for living in our society.

This objective has drawn many parents into membership in the Bell Association — parents who feel that if at all possible, deaf children should live in their own homes, attend local public schools, belong to Boy Scouts and Girl Scouts, and do everything else that seems to go with a typical home life in America today. These parents have for years been encouraging, in some cases demanding, good educational programs for their children in their own communities. As a result of this parental pressure and interest, the Bell Association has become aware of the growing need for properly organized and staffed day classes and day schools throughout the country.

We get inquiries quite regularly from parents asking what is available in the way of day programs. We tend to encourage that deaf children, if possible, remain at home and grow up in their community. But while encouraging in this direction, we have to be extremely cautious because there are many day programs that have evolved that leave a great deal to be desired.

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* George W. Fellendorf, Executive Director and Editor, Alexander Graham Bell Association for the Deaf.

So the Bell Association, as a representative of both the parents of deaf children and of the professionals in this field, is encouraging the support of this conference with the hope that it can, through this conference, become aware of better day programs and make more forthright recommendations of programs suited to the child's needs. This conference is an expression of wishes, hopes, and needs to improve day programs for hearing impaired children all over the nation.

I think there are a lot of people watching us here at Lake Mohonk. I pray we can effectively carry out this responsibility.

UNITED STATES OFFICE OF EDUCATION INTEREST IN GUIDELINES FOR DAY PROGRAMS

James W. Moss, Ph.D.*

Dr. Moss first introduced Dr. L. Deno Reed, Dr. Frank Withrow, and Joanna Schneider, all of the Department of Health, Education, and Welfare.

I would like to make a few points in passing to help start this conference upon its obviously successful course. You are all here to concentrate on problems with reference to the day school education of deaf youngsters. I would like to suggest that you avoid a concentration on yesterday's problems. It is always so easy to identify a group of problems which you started worrying about in 1940. I would hope that you won't even spend too much time on today's problems because today will not last very long. But take a very solid, strong, and hard look at tomorrow's problems, because with a little bit of luck they can be solved before we get them.

Here are a few of the problems you might want to give some thought to for the future; most relate to Title VI of Elementary and Secondary Education Act. As funds become available for the development of new programs, you will be faced with serious staff shortages. You will be asking yourself whether a poor teacher is better than no teacher at all, whether inappropriate services are better than no services. You will be faced with the pressures of providing services for which there will be ample funds, but without the trained people so very essential for quality programs.

Those of you involved in day school programs for deaf youngsters will have to work very closely with the State Education people. The Title VI fund will be administered through the State offices, and you will have to make your needs known and sell your programs if you are to share the benefits of Title VI.

There is an obvious mandate under Title VI to develop and support preschool programs for handicapped youngsters. You will need to give some thought to the problems this will evoke. Existing schools are already overcrowded. Space must be found to accommodate preschool children. It is possible for you to contract for educational services at the preschool level, thereby taking advantage of existing community resources and facilities. Although you may contract for services, you cannot contract for responsibility. Some supervisory procedures will have to be employed to assure that contractees provide the quality of service which you desire and to which the children are entitled.

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* James W. Moss, Ph.D., Director, Division of Research, Bureau for Education of the Handicapped.

Some of yesterday's problems may no longer exist. They may not be dead, but let's hope they are retiring. We are no longer fighting day school vs. residential services. We have both. We need both. That battle no longer exists. The battle over oral vs. manual approaches is also on its way out. We don't have time to worry about such battles any more. We have other battles. There is, in fact, today a thing we can call a field of education which we identify as "education of the deaf" — a bona fide, honest to goodness thing that exists. It is related to other fields. It is a subdivision of the broader view of education. You have a field, and as professionals you have to assume responsibility for this field of study. You have to assume responsibility for the direction it will take. There must be leadership in this business of education for the deaf. There must be some feeling of cohesiveness, a systematic attempt to get from where you stand now to where you want to be in the future. It will not happen by accident. The field of education of the deaf must show strong leadership at this particular time because of the nature of changes in the field. Somebody and some people must stand up and say we have got to move ahead. It can't be done without leadership.

This conference is a beginning. Keep in mind that a conference itself accomplishes nothing. Before you leave here you should plan a course of action which gets you from your conference recommendations to some action in the field. If you can't see a course of action, go back and look again. There must be a way of going from here to there. There is a way of moving from here to there. It is the task of this conference to seek out such ways. I wish you well.

THE PROGRAM AND ORGANIZATION OF THIS CONFERENCE

Harriet L. Haskins*

The participants of this Conference represent several specialty areas concerned with the education of the hearing impaired child. Undoubtedly, each has his own pet ideas relative to the topic. For the purpose of this Conference we are charged with the task of examining the policies and practices of the various states in relation to the organization and administration of day programs for hearing impaired children in the local schools. Day programs are defined as day schools and day classes. This Conference is to focus attention on the following specific areas:

Screening for early identification
Diagnostic evaluation
Admission criteria
Personnel -- supervisory and classroom teacher
Demographic and economic base criteria.

These are to be considered in relation to organization and administration of day programs.

The format of the Conference is the pattern of plenary sessions and work groups. There will be five work groups each with a chairman, a recorder, and a research specialist. These three persons will remain in the same work group throughout the Conference, while the other participants will rotate as designated in the outline. We are fortunate at this Conference to have the help of assistant recorders who are doctoral students at Teachers College.

The Chairmen will help to lead you in discussions specifically related to each plenary session. They will encourage the group to formulate specific recommendations. A time limit of five minutes seems appropriate for a given speaker or discussant.

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* Harriet L. Haskins, Hearing and Speech Center, The Johns Hopkins University Hospital, and Conference Director.

The Recorder will identify the items to be recorded and direct the assistant recorders. They will help to formulate the written material.

The Research Specialist will seek to identify researchable topics and will record them.

The recorder and research specialist reports should be written with carbon copies -- one to go to the chairman and one to Pauline Jenson who will assist by having them typed.

At 4:30 the chairmen, recorders, and research specialists will meet to review the progress of the Conference.

At 8:00 P.M. the chairmen will report on the topics presented by the recorders and research specialists as expressed by their groups during the day. We are asked to listen to all of the reports in the evening before entering into a discussion about them.

PART III

INTRODUCTION

Eleanor Vorce*

An introduction to this conference, historically speaking, takes one back as far as 1884, when Alexander Graham Bell addressed the Chicago Board of Education. Or, perhaps one might begin in 1885, when he appeared by invitation before the Senate and Assembly of the Legislature of Wisconsin in support of the location of public day schools for the oral instruction of deaf mutes in the cities and towns of that State. In 1888, in an address delivered at Jackson, Mississippi, Dr. Bell stated:

> "As consequence of this moderate and courteous discussion, a growing spirit of eclecticism has become manifest, and we are slowly evolving an American type of school and eclectic methods of instruction. Why is it, then that with all these evidences of progress and liberality, so many deaf children are still left to grow up in ignorance and dependence? To my mind, the statistics of the census indicate a defect in our methods of reaching the deaf. The institution plan necessitating the removal of the children from home is opposed to the natural instinct of the parents. No increase in the number of our institutions will therefore remedy this evil without a law of compulsory attendance. It is a hard thing for a mother to part with her child, and though the rights of the community must of course have precedence over the rights of individuals, I do not think that the community has a right to demand the compulsory education of a deaf child at an institution unless it can be clearly shown that the education of the child necessitates removal from home. The remedy is to be found, I think, in the extension of the day school plan where practicable * * * *."

Although day schools and day classes for deaf children have existed in this country since the latter half of the nineteenth century, the past several years have seen a tremendous increase in the number of new educational programs. Not only are these children being identified at an earlier age, but greater amounts of information are being disseminated so that parents, educators and others are more aware of the educational possibilities. As a result, private and public groups have established new schools, and parents who are desirous of keeping their children at home have been instrumental in initiating day classes. Since no single set of guidelines has been available for use in establishing new programs, incomplete or inadequate facilities which do not meet basic needs of children often result.

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* Eleanor Vorce is Principal of the Lexington School for the Deaf, New York, N. Y.

The Alexander Graham Bell Association for the Deaf, since its establishment 80 years ago, has been a center for the dissemination of information pertaining to the oral education of deaf children. This service is particularly well known to parents seeking advice on the education of their children. In fact, impetus for this conference has come from the parents and teachers as well as from organizations and local departments of education, many of whom have turned to the Bell Association for advice in the establishment of new programs and for improvement of those already existing. Aware of the need for guidelines, the President of the Bell Association, in 1962, appointed a Committee on Educational Standards composed of educators of the deaf to address itself to this problem. The committee met at national and international conferences, and then continued their work by correspondence until it became apparent that the task could not be completed with such limited time for study and discussion of the problems concerned.

It was at this time that the Board of Directors of the Bell Association began a search for funds to subsidize a workshop or conference which would bring together the members of the committee and other interested persons. The first of several requests for funds was submitted to the Office of Education in July of 1966, and was not approved because of a policy which stated that the limited funds available "would not be used to support conferences and workshops." Strong in its resolution to pursue this project to its conclusion, the Board, at its annual meeting in 1965, accepted the following recommendations of the committee: (1) to invite Teachers College, Columbia University, to join with them in resubmitting the proposal to the Office of Education, and (2) if this attempt failed, to sponsor a national conference with private funding or, if necessary, by inviting day school leaders to attend at their own expense. In accordance with this plan, a joint proposal was submitted with Columbia University, and, in the Fall of 1966, authorization for this conference was given by the Office of Education.

During the process of compiling its recommendations, the Bell Committee made brief but revealing surveys of selected state and local regulations governing programs for hearing impaired children, and sent questionnaires concerning requirements for supervision of programs to a large number of day schools throughout the country. In the survey of regulations disparities were found in almost every area: namely, in defining the children who were eligible for the programs; in specifying sizes of classes; in specifying the minimum number of classes in a program; in providing facilities for classrooms; in teacher qualifications; and in provisions for supervision. Of the nearly 50 day schools which replied to the 1963 questionnaire regarding supervision, almost one-fourth indicated that supervisors were not required to be experienced in the education of the deaf and approximately one-fourth did not require that the supervisors hold a Master's degree. Volunteered comments included: "One supervisor through the special education and Board"; "no supervisor now - - - would want qualifications"; "standards are goals, not now required"; "three classes, no supervisor"; "five classes under supervision of Coordinator of Special Education"; "no supervisor, two elementary classes in different schools"; "forty-four children with head teacher and district superintendent sharing responsibility -- not a teacher of the deaf"; "two teachers in the program meet frequently."

The results of the surveys increased awareness of existing problems, and the committee set about the task of organizing its recommendations around eight general topics:

1. Children eligible to be educated in day programs.
2. Policies for admission to or release from day programs.
3. Extent and range of classes in the programs.
4. Educational program.
5. Qualifications of teachers.
6. Supervision of programs.
7. Equipment and classroom specifications.
8. Necessary additional services, e.g., psychological, audiological, medical, parent education and counseling.

In the interval since the Committee on Educational Standards was initiated in 1962, much interest has been focused on the education of the deaf by the Federal Government. A National Conference on Teacher Preparation was held at Virginia Beach in March of 1964. Although much ground was covered at that conference, there was little doubt at its conclusion that increasing the numbers of qualified teachers of the deaf was not the complete answer to the problem of successfully educating the hearing impaired child. There still remained many concerns, including the basic problem of utilizing these new teachers in a manner that will result in improving the education of children with hearing losses in the many communities which do not have any facilities or have inappropriate facilities.

The pressure to initiate programs for young hearing impaired children has resulted frequently in multi-grade classes. Of particular note is the following statement in the report to the Secretary of Health, Education and Welfare made by the Advisory Committee on the Education of the Deaf, 1965:

> "While there is reason to believe that the information is not in all cases complete or fully descriptive of the programs, the listing of day classes for the deaf in the American Annals for the Deaf,

> Jan. 1964, shows 142 schools having graded class systems with fewer than 20 deaf students enrolled. Of these, 84 supplied information on the number of teachers assigned grades from 1 to 6. In only four cases did the number of teachers equal or exceed the number of grades covered. Nearly half of the schools in the group (35) reported 6 grades offered, and half of these (17) reported only two teachers covering two or more grades, and 39 reported only one teacher who was responsible for from 3 to 12 grades."

Under the auspices of the Council for Exceptional Children, a National Conference was held in May 1965 to revise and approve the work of the Committee on Professional Standards. One section of this report dealt specifically with the preparation of teachers of deaf children.

Still another related activity was the recent National Conference on the Education of the Deaf held in April 1967. While not dealing specifically with the question of day schools and programs, the discussions during the three days of this conference did touch upon many areas pertinent to this research conference on day programs.

This meeting, the first of a series of four proposed conferences, has addressed itself to one particular aspect of day school programs, organization and administration. It is anticipated that future conferences will deal with other critical areas; such as, educational technology and curriculum, inter-disciplinary coordination, and the role of parents. It is hoped that the published proceedings of this and other conferences will be widely distributed, and that their value will be realized in improved educational programs for children with hearing disabilities.

THE DAY PROGRAM MOVEMENT
IN THE EDUCATION OF THE HEARING IMPAIRED

Ann M. Mulholland*

It is appropriate that the National Research Conference on Day Programs for Hearing Impaired Children is being held in 1967, the centennial celebration of the establishment of oral education of the deaf in the United States, for the evolvement of one has been dependent upon the other. The day school program was initiated partly through the efforts of Horace Mann, since he not only brought reforms to the American public school system but he also introduced the German method of oral education for the deaf to the United States. This desire to teach deaf children to communicate orally culminated in the founding of three schools: the Clarke School and the Lexington School for the Deaf in 1867 and, two years later, the first oral day school at Boston named for Horace Mann.

Nineteenth century philanthropists, educators, and legislators believed that, since the basic unit of society was the family, the deaf child should not be required to be sent from his home to be educated. The oral approach ensured this kind of schooling as the child could learn from those around him, maintain his position in the home and in the community, and, equally important, the family could maintain responsibility for the child.1/ That this concept has met with the approval of the American public is attested to by the rapid increase in the number of day schools and classes established throughout the country since 1867 and the still greater increase within the past 15 years.

To one informed about the education of the deaf, the terms "day school" and "day class" have specific meaning. Day school usually refers to several classes for hearing impaired children housed under one roof and restricted to the instruction of deaf children homogeneously grouped. Day class may refer to a single homogeneously grouped class or to a single class of hearing impaired children of various chronological ages, degrees of hearing loss, and educational attainment, the class being located in a public school for normally hearing children. In this Conference, day programs refer to nonresident instructional facilities for hearing impaired children, including day schools, day classes, and other similar instructional units.

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* Ann M. Mulholland is Coordinator of Teacher Preparation, Program for Hearing Impaired, Teachers College, Columbia University, New York.

1/ Best, H. *Deafness and the Deaf in the United States.* New York: Macmillan Company, 1943, 448-458.

Day Schools

At first day schools were founded in large urban centers where the population of hearing impaired children was sufficiently large to warrant such a facility not only educationally but also economically. Not all of the schools established during the intervening years have been continued. It has been only within the past few years that the Annual Directory of the American Annals of the Deaf has reported an increase from the long-standing ten day schools to the present 15 schools.

Day Classes

With the success of the day school movement, smaller communities began to emulate the city schools by initiating a single class of young deaf children, adding additional classes yearly as the first class progressed. In communities where hearing impaired children were of varying ages but in insufficient numbers to establish more than one class, a multi-grade class was formed, often having a range in ages of from three to ten years. The philosophy underlying the formation of day classes was based essentially upon the emphasis on family life, exposure to normal patterns of language, place in the community, development of habits of independence, and the desirability of integration with normally hearing children in the regular schools. Expediency, too, has influenced the increase in day classes, for, as population rose in the cities, it has not been possible to provide for suburban children within a single city school. Further, transportation costs became a burdensome item to the taxpayer, and conveniently located single classes multiplied. Initiated often by parental pressure and frequently unsupervised by qualified educators of the deaf, the growth of day classes has been rapid, with little concern for the adequacy of the instructional program and dangerously little knowledge of the inherent limitations of isolated classes or of multi-graded classes, and with long-range planning for a continuing program often completely neglected.

Additional factors influencing the extension of day programs include: the advent of the transistorized hearing aid, improvement in group aids, earlier diagnosis of hearing impairment, increased mobility of the population, and economic conditions which fostered suburban living. These developments coupled with the demand for local autonomy have resulted in a plethora of day programs. Further, there has been no single voice of a professional organization raised to halt or to enforce professional standards and to ensure quality education for hearing impaired children.

Briefly, the following tabulation summarizes the educational facilities for deaf children now available in the United States:

Type Facility	Number
Public Residential Schools	66
Private Residential Schools	14
Public Day Schools	15
Private Day Schools	11
Public Day Classes	352
Private Day Classes	53
Public Classes for Multiply Handicapped	15
Private Classes for Multiply Handicapped [1]	2

This minor segment of the total U.S. school population, of concern to this Conference, attends a total of 528 schools and classes. More than 60 percent of these children are now educated in day schools and day classes. There has been a constant increase in the number of children and, concomitantly, in the number of classes to accommodate them. Table I [2] shows the increase in the numbers of pupils and teachers since 1850, and provides additional information for use in this Conference. Table II shows this same information graphically.

Table I

Deaf Students and Teachers of the Deaf (1850-1967)

Year	Number of Teachers	Number of Pupils
1850	66	1,148
1858	155	1,721
1868	177	2,937
1878	382	6,227
1888	606	8,372
1898	1,188	9,749
1908	1,552	11,648
1918	1,858	12,792
1928	2,392	16,807
1938	2,769	19,278
1948	2,820	18,316
1958	3,643	24,279
1959	3,774	25,525
1960	3,898	26,443
1961	4,100	27,589
1962	4,309	28,529
1963	4,478	29,398
1964	4,660	30,799
1965	5,151	32,256
1966	5,246	34,658
1967	5,528	35,943

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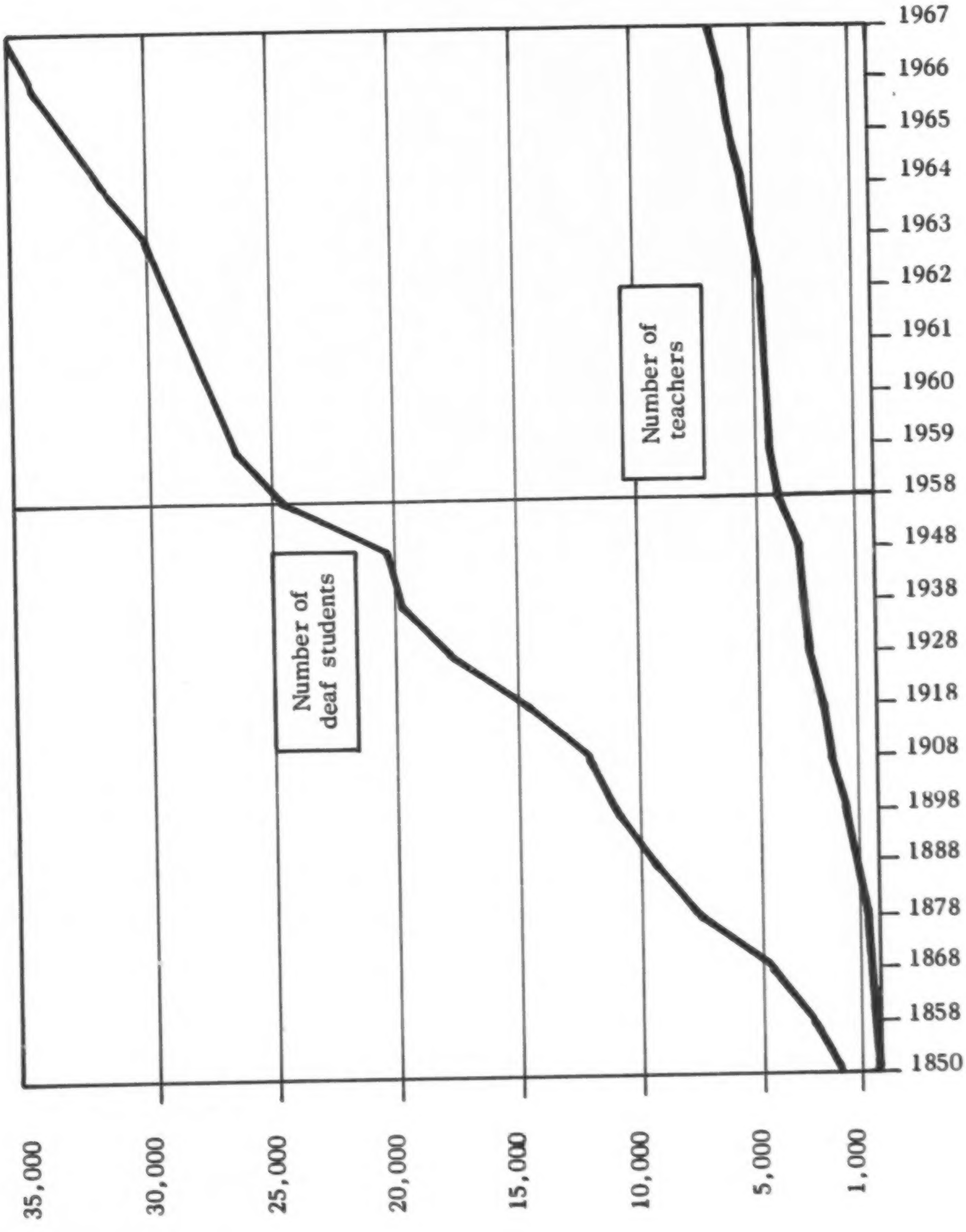
[1] Doctor, P. *Directory of the American Annals of the Deaf,* 1966.

[2] Doctor, P. The effects of socialized medicine in the area of deafness. Paper presented at the American School for the Deaf, Hartford, June, 1967.

Table II

Number of Deaf Students and Teachers of the Deaf (1850-1967)



The ratio of increase of children and of teachers remains relatively constant although there is a marked increase in children with hearing impairment. Attrition may be caused by a number of factors, for example, the small number of teachers added in 1966 may have been due to larger numbers who retired. The needs in that year doubtless were met by the increased supply of teachers resulting from the federally sponsored fellowships available and personnel added to the schools in 1965 when a disproportionately high increase of 491 teachers was reported.

If the requests for teachers made to the directors of teacher preparation programs today is an indication of the extent and rate of growth of day programs for the hearing impaired, then reported figures are deceptive. There is a continuing need for adequately prepared personnel at all levels together with an increasing demand for specialization.

The number of private day programs has been reported. This group is of particular concern when considering pre-school population. The attention of this Conference will be called to the incidence of deafness in the high-risk group, particularly the increase in numbers of children whose hearing loss resulted from the Rubella epidemic of 1963-64 who are expected to be enrolled in September 1967 in programs for the hearing impaired. Frequently, it is the private agency which maintains the educational program for pre-school children.

In the working papers distributed preparatory to this Conference, tabulated data were included which were received from 39 states, although eight states have adequate reporting systems. In order to determine the anticipated pre-school population, the number of children reported in nursery and pre-school programs conducted in university and hospital clinics and reported in the American Annals was checked. By October 1965 there were approximately 3,100 hearing impaired children enrolled in nurseries located in 144 university and hospital clinics. Only 95 of these 144 clinics had a trained teacher of the deaf on the staff. Of 164 clinics making recommendations for educational placement, only 85 had as a staff member a teacher of the deaf. The questions raised are obvious. Is the hospital or university clinic the proper setting for the initial education of hearing impaired children during the critical years when language develops or should be developing? Who supervises the educational programs of these children? What responsibility does the state or local consultant for the hearing impaired have for supervising, establishing minimal standards?

Present Status

The 32 classes visted by a three-member team in preparation for the working papers sent to conference participants were located in nine states and considered to be geographically representative. From these visits and from correspondence with Directors of Special Education a number of conclusions were drawn. These conclusions are referred to as common characteristics, namely: (1) in general, there are legal provisions nationally for education of the deaf from three to 21 years of age with younger children found more frequently in day programs than in residential schools, and a tendency to lower the legal age to under three years; (2) financially, day schools and day classes are supported by local funds or by a joint contribution with the state frequently supplying 50-75 percent of the total cost. In some states this is based on reimbursable units, or a proportion of teacher's salary (if certified by the state), or an outright proportionate amount per child; (3) in order to reduce the costs to a given school district for educating hearing impaired children, some communities contract for services in adjacent communities; and (4) cost of transportation varies and is a reimbursable item for parents and for local communities, being borne proportionately by the state.

As a result of the increase in numbers of day classes, a variety of organizational patterns have evolved at the state and local level. Although the state is responsible for providing education for the children within its borders, in only eight states are there persons appointed with sole responsibility within the state for the educational programs for the hearing impaired. The terms "supervisor" and "coordinator" have various meanings, dependent primarily upon the level of operation. Too often the state supervisor assumes less of a leadership role and more the role of processor of applications for enrollment, funds, admission, or for purchases. In those instances where services are contracted for beyond the geographical limits of a governmental jurisdiction, responsibility for the quality of the child's educational program is shed by the local or state authority assuming the financial responsibility. A most striking characteristic of day programs is the lack of communication between the public state residential school and the public day school and day classes. The degree of communication between the private schools is similarly low and seems to reflect the lack of leadership at the state level, if one can judge on the basis of those states where there is a strong state consultant or coordinator. In these latter instances, there is cooperative effort directed towards ensuring quality education for hearing impaired children and towards maintenance of professional standards and communication. Consistent with these observations, there is little indication of certification for supervisors requiring even teaching experience with the deaf or hard of hearing. The increase in numbers of day classes, 125 for 1966-67, is not accompanied by a concomitant increase in supervisory personnel.

In sampling the day programs throughout the country, it was apparent that inequities of financing resulted in continuing use of obsolete, defective, or inadequate auditory training equipment.

One of the most glaring problems results from the lack of a single authority to coordinate the educational and para-educational facilities within a given state. Such basic information as the audiological report was found to have taken as long as two years to filter to the classroom teacher. In many of the communities visited or reported, appropriate diagnostic information was lacking. In those instances where a team approach was used, rarely did the team observe the child simultaneously. This assembly-line processing leads to inadequate diagnostic information upon which the individual child's educational program is to be planned. The referral process and the decisions regarding educational placement are in need of study.

Trends identified in day programs for the deaf and hard of hearing include:

1. Evolvement of a special education district encompassing the handicapped children in a number of local school districts and financed jointly by all of the local school districts concerned;

2. Joint agreements executed between two or more school districts for the purpose of strengthening the educational program for hearing impaired children, including diagnosis and supervision;

3. Establishment of "satellite" classes staffed, supervised, and financed by a large public school for the deaf; and

4. Changing functions of the school for the hearing impaired.

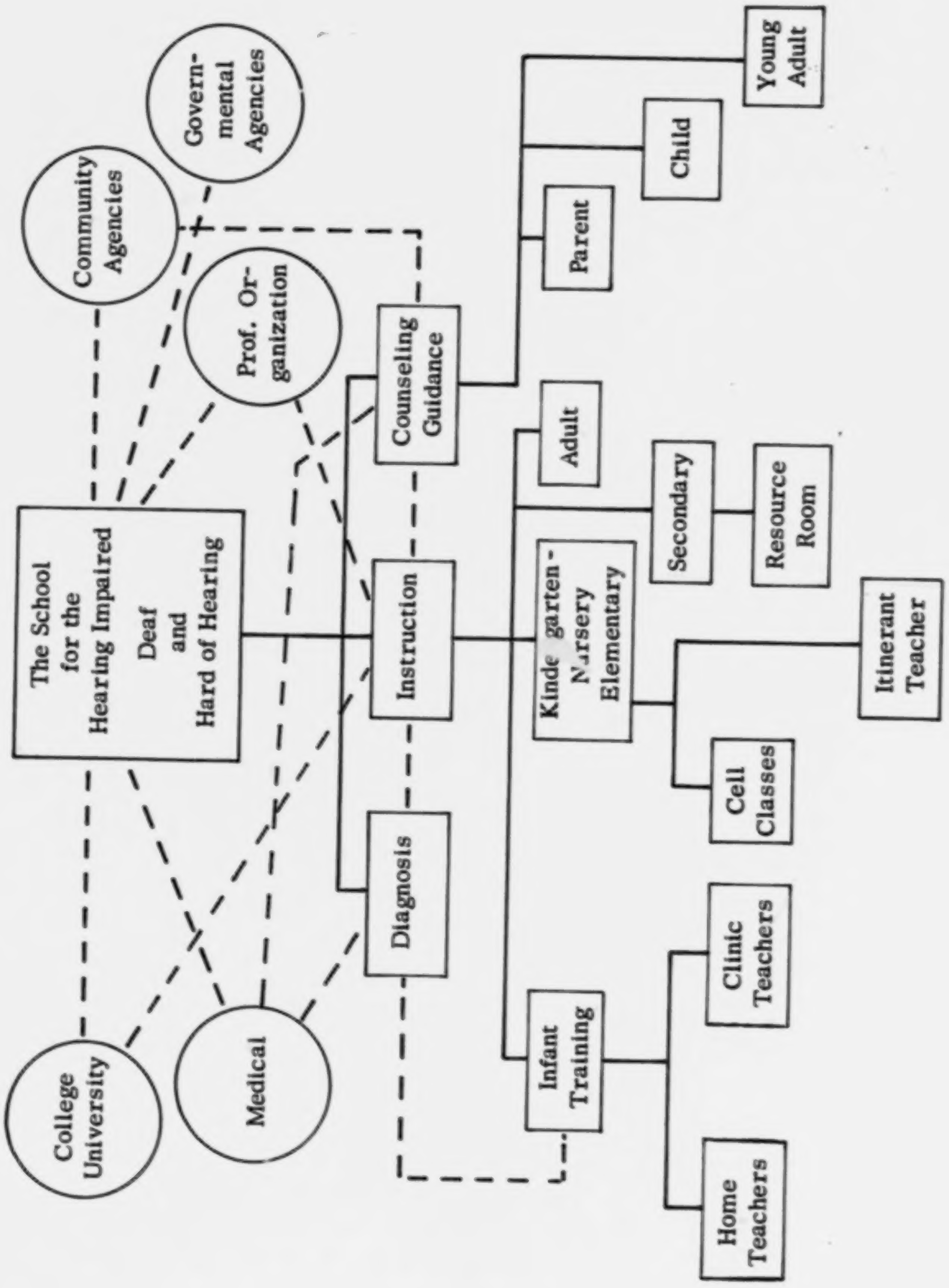
Table III indicates the three-fold function of the school for the hearing impaired, namely: (1) diagnosis, (2) instruction, and (3) counseling and guidance: (1) adequate diagnosis entailing several specialists and temporarily initiated in early infancy with regular re-evaluations of total functioning is basic to a sound educational program; (2) instruction from early infancy to adulthood in the home, satellite or cell classes, in special schools, in resource rooms; and (3) counseling of not only the parents initially but on-going as well as the hearing impaired individual himself passes through those critical stages when decisions at varying life-stages are made. Envisioned in this manner, the school for the hearing impaired no longer operates in isolation, and it is concerned with quality education based on the involvement of parents and a team of specialists, individualized programming for each child on the basis of his information reception and processing system, and supervised by qualified personnel at the state level.

Because of the rapid growth of day programs and the innumerable resultant problems, there has developed a concern for quality education in the day programs. This Conference will examine the problem of organization and administration and focus upon:

1. Effective organizational plan and its units.
2. The isolated classes and their inherent limitations.
3. The lack of continuity in educational programs and the means of predicting enrollment and subsequent long-range planning.

Table III

The Emerging Role of the School for the Deaf


The School for the Hearing Impaired Deaf and Hard of Hearing
College University
Medical
Community Agencies
Govern-mental Agencies
Prof. Or-ganization
Counseling Guidance
Instruction
Diagnosis
Parent
Child
Young Adult
Adult
Secondary
Resource Room
Kindergarten - Nursery Elementary
Itinerant Teacher
Cell Classes
Infant Training
Clinic Teachers
Home Teachers

2

4. The initial as well as the continuing educational diagnosis of children.
5. The determination of responsibility for educating the very young child.
6. Adequate supervision by qualified personnel.
7. Transportation and its effect upon the length of the school day.

Conclusion

Pertinent questions are: (1) How should day programs for hearing impaired children be organized? At state level? Regional? (2) What financial considerations should there be? (3) What should be the authority of supervisory personnel and what should his qualifications be at the state, local, or regional level? (4) What should screening programs for early identification include? What agencies should be involved in a screening program? (5) How can one plan for enrollment of children? (6) What constitutes an initial and on-going program? Who makes the recommendations and who should be making them? (7) What should be criteria for admission to a program? (8) What about transportation and long-range plans? (9) How can a program be coordinated with the community specialists? (10) How can a desirable program be organized and established for every hearing impaired child?

This National Research Conference on Day Programs may well mark a period of reform in the education of the hearing impaired. The charge here is: (1) to assist in the solution of problems arising from the expansion of day programs; (2) to identify needed research; (3) to be the voice of teachers not presently heard in a professional organization and of the administrator concerned with quality education; and (4) to indicate minimum for adequate preparation which would enable the hearing impaired to function most effectively in a society that has need for his skills and his competencies.

Problem One

ORGANIZING AND ADMINISTERING AN ADEQUATE DAY PROGRAM AT STATE AND LOCAL LEVELS

Charles W. Watson*

Included in the consideration of organization and administration of day programs are the following topics: (1) legislation and state administration; (2) maternal and child care program incidence figures as a guide for the numbers of children needing special services; (3) a mandatory central registry; (4) new legislation affecting revision of laws relative to pre-school education; (5) agencies responsible for various educational programs for hearing impaired children; (6) autonomy and control of city programs versus state programs; (7) effect of legislation upon future teacher ratios; (8) laws relative to teacher-pupil ratios; (9) supervision of in-service training programs; and (10) periodical evaluation of the progress of pupils.

Legislation and State Administration

(Using California as an Illustrative Case)

It should be said that every state should provide by statute that all children, handicapped as well as normal, have the opportunity to attend the free public schools of the state. The State Department of Education, through the chief state school officer, should have the authority to insure that each such child will have the opportunity for an education.

The organization of the public schools differs from state to state, but generally speaking, each has a local, an intermediate, and a state level educational unit. Each level should embrace provisions for the education of handicapped children. At each level, opportunity should be provided for their needs to be considered by persons responsible for determining policy and making administrative decisions. Numerous islands in society have not accepted the concept that every child is entitled to an education to the extent of his capacity. For this reason, those responsible for education of handicapped children must work where they can be effective advocates for the needs of these children. Only then can officials and citizens be brought to recognize the concept that each handicapped child is equal before the law, equal in his claim to freedom, equal in his right to opportunity, and equal in his right to the key to that opportunity--education.

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California has such a spokesman, a deputy superintendent, at the policy making level within the State Department of Education. Heading the Division of Special Schools and Services, he has the assigned task of recommending policy and carrying out the statutory requirement to promote and to direct special education in the public schools for physically handicapped children. This responsibility includes hearing impaired children since they are covered in the physically handicapped classification.

By law, school districts and county superintendents in California are required to provide for the education of physically handicapped minors. In addition, the Department of Education is required to maintain two state residential schools for the education of deaf children, one for the blind, and two for cerebral palsied children.

The Bureau for Physically Exceptional Children is charged also with providing advisory, coordinative, and supervisory assistance to school districts and county superintendents of schools maintaining special education programs for physically handicapped minors. The work of the Bureau is carried forward through consultants who currently number ten. Two of these consultants serve the deaf and hard of hearing with one working out of Sacramento and the other working out of Los Angeles.

Special education programs for the physically handicapped are mandatory. The same is true of programs for the mentally retarded, but not for the educationally handicapped or the gifted. The Legislature has yet to authorize school districts, county superintendents of schools, or the Department of Education itself to provide special education programs for multi-handicapped children. Hopefully, measures before the Legislature will see some breakthrough for these children.

A physically handicapped minor is defined as any physically defective or handicapped person under the age of 21 years who is in need of education. Such minors may be admitted to special schools or classes at the age of three years. Any local school system furnishing education to such minors must furnish education to all such minors actually living within the district five or more days a week, even though legal residence may be outside the district.

Districts having an average daily attendance (A. D. A.) of 8,000 children in the elementary schools, and also in the high schools of the district, are required to provide special education programs for the physically handicapped. County superintendents are required to provide such programs for all districts having less than an 8,000 A. D. A. in the schools. The mandatory provisions of the statutes, however, contain flexibility which permits inter-district, inter-county, and inter-district/county agreements for the education of physically handicapped minors. A number of the special day class programs for the deaf operate under such cooperative agreements.

In the event a physically handicapped minor cannot find placement in a special education program maintained by the district, the county or the state, parents may be given financial assistance toward the tuition in a private school educating such minor. Application is made to the district of residence which, if the application is approved, pays the parents. The state later reimburses the district for such payments within the limits of the amount authorized for a district for such payments within the limits of the amount authorized for a district maintained program.

The state assists school districts and county superintendents with the excess costs entailed in the education of physically handicapped minors. At the present time in California this is up to $910 per A.D.A. In addition, the state reimburses for the cost of transportation up to $475 per A.D.A. School systems receiving this support also get the same regular state support for these children that is allowed for nonhandicapped children. This amounts to $125 per A.D.A. in all cases, and more for poor districts eligible for equalization aid. Of course, the local districts must put in the same local tax effort for these children which they make for all other children.

As mentioned earlier, the state maintains two residential schools for the deaf. One is located in Berkeley and the other in Riverside. Every deaf person who is a resident of the state, who is of suitable age and capacity, is entitled to an education without cost. The state schools are funded annually by direct appropriation from the General Fund. District and county programs are supported from the State School Fund. Each school district having a deaf child enrolled in a state residential school is billed annually for an amount per child equal to the tax effort made for a normal child in the district. The Superintendent of Public Instruction can apportion no state funds to districts or county superintendents of schools for the education of physically handicapped minors if the programs do not meet the standards established by the state superintendent's office.

School districts are authorized to provide the following programs for the physically handicapped:

1. Special schools.
2. Special classes.
3. Instruction in hospitals, sanatoriums, preventoriums.
4. Instruction in the home by home instructors.
5. Vocational training by cooperative arrangement with the Department of Rehabilitation.
6. Individual instruction in school or home for minors who are deaf and between the ages of three and six years, providing there are fewer than five such children in the community.

7. Integrated programs of instruction for physically handicapped children, including those handicapped in vision or hearing.

County superintendents of schools are authorized to establish and maintain the following programs for physically handicapped children:

1. Special schools or classes of elementary and secondary grade.
2. Employment of emergency teachers to provide special instruction in regular schools of the districts of the county.
3. Employment of home instructors to give individual instruction in the home or at the bedside in institutions; employment of instructors to provide remedial instruction for physically handicapped minors in regular, special day, and special training schools or classes authorized to be conducted; and employment of instructors to provide individual instruction for minors with speech disorders or defects who are at least three years of age, for the purpose of remedying such disorders or defects.
4. Cooperation with the Department of Rehabilitation in the provision of individual instruction and coordination services.
5. Contractual agreements with the county superintendent of schools of another county or with the governing board of any school district.

In California, every attending or consulting physician who examines any child under 20 years of age found to be totally deaf or with impaired hearing as defined by the State Board of Education is required by law to report at once to the Department of Education the name, age, residence, and the name of the parent or guardian of the minor. The county superintendent of schools, with the approval of the county board of education, certifies to the county auditor and the county board of supervisors the amount of money required to be raised by a county tax for the identification and education of physically handicapped minors. The governing board of any school district must, subject to exemptions, provide for testing of the sight and hearing of each pupil enrolled in the schools of the district.

The Superintendent of Public Instruction may authorize the California Schools for the Deaf, Berkeley and Riverside, to serve as testing centers for deaf and hard of hearing minors. These centers test hearing acuity and give such other tests as may be necessary for advising parents and school authorities concerning an appropriate educational program for the child.

Provision for individual counseling and guidance in social and vocational matters is mandated as part of the instructional program for physically handicapped pupils. Upon approval by the State Department of Education, the governing board of any school district may separately or in cooperation with one or more other school districts, or in cooperation with the Department of Rehabilitation, employ a special coordinator to make a study of employment and occupational opportunities, and to assist in coordination of the education of physically handicapped minors with the commercial and industrial pursuits of the community so as to prepare them for employment. A cooperative arrangement for vocational placement for the physically handicapped can be established by the State Department of Employment through the State Employment Service with local school officials and the State Department of Education.

Contracts may be entered into by districts, county superintendents and any department or agency of this state to obtain or provide services and other assistance necessary for effective rehabilitation including, but not limited to, occupational training, mobility training, sheltered workshop placement and work experience education.

Guidance and counseling services for parents of pre-school deaf minors are provided at a nursery school-parent institute annually conducted by the State Department of Education. A similar service can be provided to the minor and his family through home instruction. Courses also are authorized for parents of a deaf child and are designed to assist and instruct them in the early care and training of the child, to train him in play and in other ways which will assure the child's physical, mental and social adjustment to his environment.

Higher education for deaf or hard of hearing individuals is encouraged through provisions to pay the expenses of any student attending Gallaudet College under a scholarship from that college. Educational aides may be provided for a deaf or hard of hearing student attending a junior college or a state college or any branch of the University of California. A person serving as an educational aide may take notes, provide manual or visual interpretation of course content, transcribe tape recorded notes, counsel the deaf student and serve as an interpreter for the deaf student in conversation with instructors and academic officials. Adult education programs are also authorized for handicapped persons.

Maternal and Child Care Program Incidence Figures--Do They Serve as a Guide in Planning for Numbers of Children Needing Special Services?

Today is the age of planning, projecting program needs and looking at long-range requirements. Some states have already gone to program budgeting; others are in the process of doing so; still more will eventually use this procedure.

These activities make basic planning information necessary, and incidence figures are important in planning, budgeting and projecting. They also are helpful in working with citizen groups, service organizations, school officials, school boards and others. They become essential to working with governmental units, such as the Department of Finance, Legislative Analyst, Office of the Controller, State Board of Education, State Board of Higher Education, the Board of Regents, colleges and universities, legislative committees, the Office of Education and other federal units, and with members of Congress and Congressional committees.

Certainly this information is essential. The chief problem appears to be the adequacy and accuracy of incidence figures now available. These often come from too narrow a base; frequently they are not sufficiently detailed or appropriately differentiated to be as helpful as is desirable. It would be productive if, at the federal level, the agencies of Health, Education, Rehabilitation and Employment could plan for and collect information on the handicapped minor population of the nation. These data should cover all classifications of handicapped minors.

Need for a Mandatory Central Registry

Those who work at the grass root level can testify from experience that much ignorance and indifference still exist in the land as to the need for educating handicapped children. While incidence figures and other data are of real value, they alone are seldom sufficient to impel a district or a county superintendent to establish a program. No impetus seems to work as expeditiously as red-eyed mothers, irate fathers, organized group efforts and headlines. Unless something of this order exists, all too often responsible persons quickly assume handicapped children simply do not live in their areas.

Certainly a system of registering, reporting, centralizing and processing information seemingly would be extremely helpful. Concrete information becomes imperative at the point when budgeting, employing, constructing, and transporting are to be undertaken. Such a register would need to be carried forward on a systematic and periodic basis. A one-time effort would have relatively little value. It might be better to mandate that a system and procedure for registering and reporting be established and maintained rather than mandating the registration itself. Emphasis should be placed on an annual public information program relative to such a system and the need for parents with handicapped children between given ages who have not completed school to register them annually under an established system. In some states, there might be greater willingness to support the registry if the actual registration itself was not made compulsory. As the value of the registration became evident, consideration could then be given to making it mandatory.

New California Legislation Affecting the Revision of Laws Relative to Preschool Education

Legislation is pending in California which will make it possible to instruct minors who are deaf or hard of hearing between the ages of 18 months and three years. At this latter age, children now can be admitted to special schools or special classes. Minors between the ages of 18 months and three years would, if the measure passes, be admitted in school for individual instruction or be instructed in the home through the employment of home instructors. These instructors must possess full qualifications for certification to teach deaf pupils as prescribed by the regulations of the State Board of Education. Other pending legislation, if passed, will authorize county superintendents of schools as well as school districts to provide such preschool instruction for hearing handicapped children.

California Agencies Responsible for Various Education Programs for Hearing Impaired Children

Currently, the entire educational program, preschool through junior college, rests within the California public school structure. The agencies or entities involved are the State Board of Education, the Superintendent of Public Instruction, the Department of Education, and county superintendents of schools and school districts. As observed earlier, state residential schools for the deaf are also a part of the public school family. The only facilities not within this network are the private and parochial schools and the school units of the state hospitals for the severely mentally retarded and for the severely emotionally disturbed. With reference to these latter programs, pending legislation would make the State Board of Education responsible for the curriculum and the qualifications of personnel employed in the state hospital schools. County superintendents of schools in counties in which state hospitals are located would be charged with the supervision of the instructional program of the hospital schools. Having all educational functions within the education family makes good sense.

Autonomy of City Programs Versus State Programs-- How They Are Controlled in California

Day and state residential school programs for hearing impaired children in California are subject to the same sources of control. This holds true regardless of how large a city or a county may be. Controls exclusive of the Legislature include the State Board of Education and the Superintendent of Public Instruction plus the Department of Education. The Department of Education is under the direction of the Superintendent, but policies for both the Department and the Superintendent are set by the State Board of Education, except when defined by state statutes. Having a prescriptive school law, school districts, county superintendents and superintendents of state residential schools can do only those things authorized by statutes, by State Board of Education regulations or administrative rules and directives. The Superintendent of Public Instruction also is charged with apportioning funds from the State School Fund to school districts and to county superintendents of schools. This revenue source makes up approximately 60 percent of the budgets of school districts and practically 100 percent of the budgets of county superintendents. The Superintendent of Public Instruction has the final administrative decision over the budgets of state residential schools. Under such an organization, the means of control are substantial and appear adequate for implementing any coordination, integration and cooperation that might be desirable in the education of physically handicapped children.

Legislation--Good and Bad--Which Affects Future Teachers Ratios

The teacher-pupil ratio is nowhere more crucial than it is in the education of hearing impaired children. Certainly laws specifying the maximum number of pupils per teacher are essential. It seems questionable as to whether there should be any specified minimum number of pupils per teacher. Furthermore, the financing of special education should be done in such a way as not to put a premium on having each teacher carrying the maximum number of pupils authorized. Effective flexibility needs to exist which will assure adjustments downward from any maximum established as the composition of a class makes this desirable. Teacher-pupil ratios should be differentiated according to the method of instruction employed, the achievement of the pupils involved, the availability of supplemental specialized tutors and aids, and the presence of "problem" pupils.

It probably is best to have the teacher-pupil ratio established by the same authority that establishes the level of state funding for special education programs. If the Legislature determines the latter, it should also be called upon to face the former. The two matters are directly related. Those contemplating fund reduction should at the same time be forced to look directly at the effect in terms of teacher-pupil ratio.

Do Laws Relative to Teacher-Pupil Ratio Create a State of Jeopardy?

In the light of the preceding discussion, such laws do not seem to constitute a hazard. As long as the teacher-pupil ratio is couched in terms of the maximum number of pupils per teacher, any local school system could maintain a smaller number of pupils per teacher than the maximum if it so desired. Any requirement, whether by statute or by State Board of Education regulation, establishing a fixed minimum number of pupils per teacher, however, would be unfortunate.

Supervision of In-service Training Programs

This topic is related specifically to the supervision provided partially prepared teachers who are in classrooms on a full-time teaching basis. It would seem best that the college or university offering the in-service training to these teachers should provide the supervision. This well might be supplemented by supervision provided by the local school system or by the county superintendent of schools. In any case, the person providing supervision should be a fully qualified teacher who, under supervision, has had a number of years of successful teaching of hearing impaired children. Supervision provided by any person having only the requisite course work and no successful experience in teaching is likely to be an anemic resource.

If in-service training is provided for fully qualified teachers needing to have their skills and competencies sharpened and refined, it would seem that supervision might best come from those supervisors responsible for the program of instruction concerned. Here, also, the supervisors should possess the preparation and experience set forth earlier. It should be understood, however, that there is on-going need for full-time fully qualified supervisors for all day programs for hearing impaired children.

The Need for Periodical Evaluation of the Progress of Pupils

Pupil progress and achievement should be subject to systematic and periodic assessment and evaluation. This begins at the time of admission to school and continues throughout the school life of the pupil. Such evaluation must not be limited to objective instruments, but must include subjective study, analysis and discussion by the teachers, supervisors, psychologists and parents. As the pupil progresses through school and becomes older and more mature, he can be brought into the evaluation process.

If an effective and productive program of evaluation is to emerge, provisions will need to be planned and covered in schedules of staff and in the budget of the school. An effective program of evaluation cannot be achieved and maintained if such considerations are not specifically planned for and supported.

Concluding Recommendations

Areas needed for consideration for the education of all hearing impaired children include:

1. Enrollments which will insure the greatest advantage from classification, grouping and grading in relation to chronological age, mental capacity, social and behavioral development, academic achievement, and extent and nature of hearing impairment.
2. Classes of a size to permit effective instruction--both group and individual--as required by the condition of pupils enrolled.
3. Teachers with specialized preparation from teacher preparation centers holding distinguished accreditation.
4. Supervisors with specialized preparation who, through teaching, have revealed themselves to be truly master teachers.

5. Adequate diagnostic and testing services so that individual differences may be identified and appropriate program provisions recommended and provided. Complementing this, there should be a program of continual evaluation of each pupil's progress and achievement.
6. Flexibility in instructional methods and techniques in order to provide for individual differences existing among hearing impaired children.
7. Coordination and integration of public day and state residential programs for hearing impaired children at preschool, elementary and secondary levels.
8. A common elementary curriculum for the public day and state residential schools.
9. A secondary program with provisions for physical and social education; prevocational, vocational and technical education; work experience and apprenticeship training programs; and extracurricular and interscholastic activities regularly involving hearing impaired students.
10. Junior college and college preparatory programs designed and operated with recognition of the needs of hearing impaired students.

Problem Two

DEMOGRAPHIC AND ECONOMIC CRITERIA FOR ESTABLISHING DAY CLASSES FOR THE DEAF

James C. Chalfant*

There are three basic questions to be considered with respect to establishing day school classes for children who have hearing impairments:

1. What are the significant factors contributing to the support of day school classes?
2. How can it be determined whether necessary resources exist in a given administrative unit?
3. How can community resources be mobilized for the support of day school programs?

This report is based on a study of day school programs for the deaf. The results of the study, however, may be related to all programs for the hearing impaired. The purpose here is to: (a) present data concerning factors contributing to the presence or absence of public school day classes for deaf children; (b) discuss a technique which has implications for local and state-wide planning; and (c) suggest an approach for mobilizing community resources for the support of day school classes for the deaf.

Factors Related to Program Support

Some school districts have established day school programs for deaf children and others have not. It is interesting to speculate why some administrative units which apparently possess the capability for supporting day programs have failed to do so, while others that seem to lack the necessary resources have found ways to provide day school classes. Several explanations have been advanced about the variables which are supposedly related to program support, including insufficient numbers of deaf children to justify classes, lack of financial ability, community attitude, and an absence of leadership at the local level. There is little objective evidence, however, which clearly identifies the significant variables that are related to the support of day school programs for the deaf nor the extent to which variables, individually or in combination, contribute to program support.

A study was conducted of 31 economic and demographic variables presumed to be related to the support of day school programs for the deaf in 101

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Illinois counties (Chalfant, 1966). Multiple regression and factor analytic techniques were used to reduce the 31 economic-demographic variables to a smaller number of interpretable factors. Six factors were found to be associated with public school provisions for educating deaf children, namely:

Factor I.	Urbanization -- The urban factor was composed of variables that typically describe urban areas, such as, population density, large numbers of children in average daily attendance, high family income, high education level, and a large proportion of the population engaged in manufacturing and white collar occupations.
Factor II.	Education -- This factor was made up of variables which are related to educational attainment, such as, median school years completed, high proportion of children completing high school or more, and increased average daily attendance.
Factor III.	Socio-economic -- This factor was described by variables which are often associated with high socio-economic levels. These include occupations usually requiring a formal education, such as white collar occupations, teaching, wholesale and retail trade, finance, insurance and real estate, transportation, communication, and public utilities.
Factor IV.	Rural Occupations -- This factor was composed of income and occupations frequently found in rural areas.
Factor V.	Financial Ability -- This factor seemed to be made up of variables which provide some measure of financial ability for the support of school programs.
Factor VI.	Population Growth -- Variables characteristic of counties with rapidly growing populations make up this factor. Chief among these are positive civilian migration, and large numbers of people engaged in construction work to build needed schools, houses, roads, and shopping centers.

The Expectancy Index

The six factor scores were used to develop an Expectancy Index for determining whether or not a county could be expected to have the resources to support day school classes for the deaf. This Index was developed by obtaining factor scores for each county, weighing the factor scores, and summing the cross products.

Index Score for Adams County $= Bf_1 + Bf_2 + Bf_3 + Bf_4 + Bf_5 + Bf_6$

Where B^k = the beta weight for deaf services

Where fk = the factor score for Adams County on the k^{th} factor

A single index score, obtained in this manner, provides a rough indication of the expectancy of counties to support day school classes for the deaf. A high index score for a county suggests that one would expect to find day school programs for the deaf in that county. A low index score suggests that one would not expect to find day school classes for the deaf. By obtaining an index score for each county, it was possible to develop an Expectancy Index for the State of Illinois (see Figure 1, next page).

The distribution of counties in Figure 1 shows that the Index identified 12 high-expectancy counties in which one would expect to find day school programs for deaf children. Of these, nine actually supported classes, but three counties did not. The Index, therefore, was 82 percent effective in identifying counties that were able to support programs. (It should be noted that, since this study was conducted, two of the three nonproviding high-expectancy counties have organized day school programs for the deaf.)

Of the 11 counties providing services at the time of this investigation, only two counties were identified as low-expectancy counties. The Expectancy Index, therefore, was 75 percent efficient in identifying those counties which provided services. It appears, therefore, that the Index has some degree of predictability for state-wide planning.

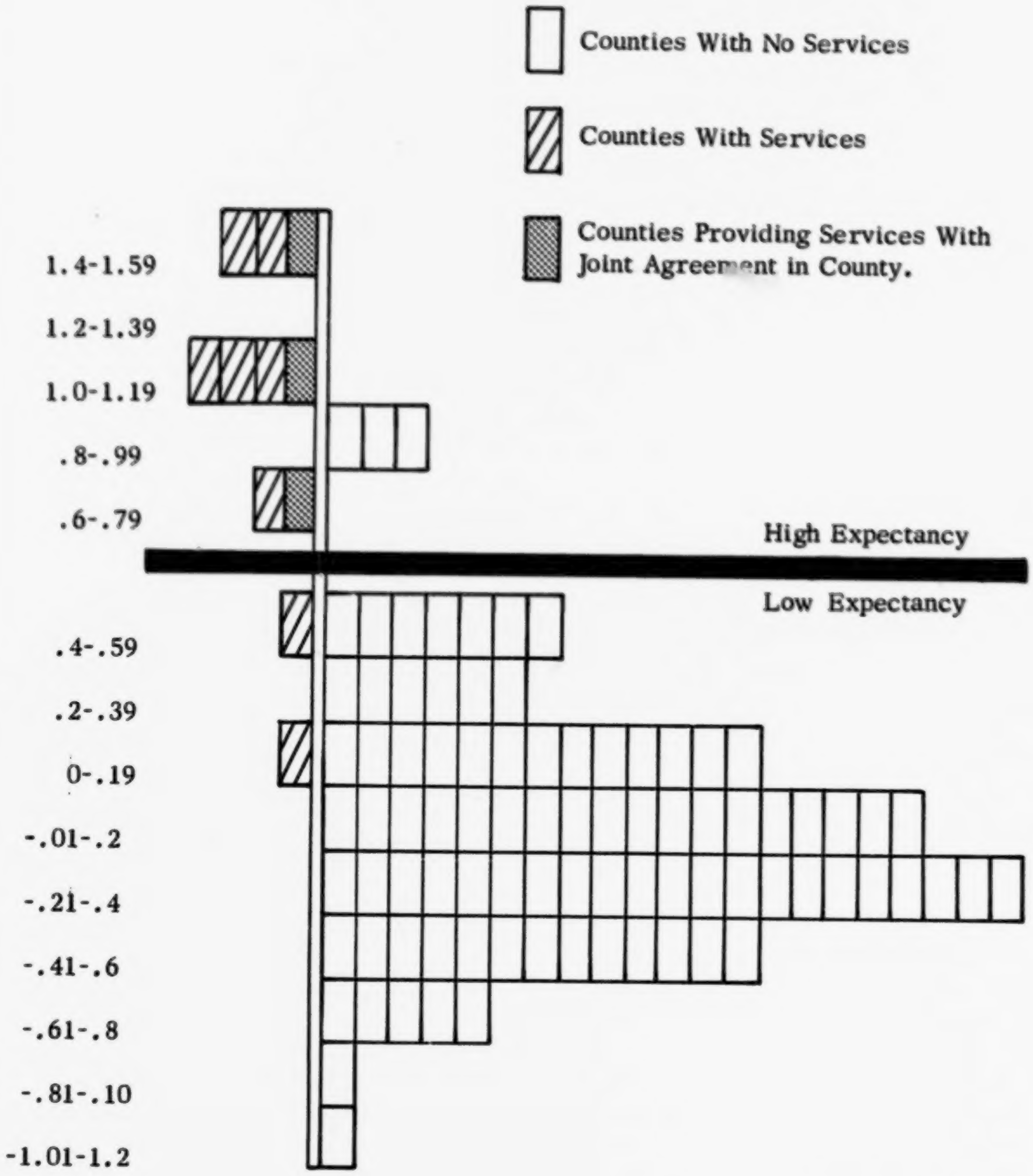
As one might expect, high-expectancy counties are typically urban, with high educational levels, socio-economic status, financial ability, and population growth. The low-expectancy counties are mostly rural with low education levels, low socio-economic status and limited financial ability. Perhaps the most interesting aspects of the study are the counties which are exceptions. Why did three high-expectancy counties, which supposedly had the necessary resources, fail to provide services, while two low-expectancy counties managed to establish at least one class each?

Of the three nonproviding high-expectancy counties, both Kane and St. Clair counties were heavily loaded on the urban factor and are adjacent to large metropolitan statistical areas which have a history of programs for the deaf. Kane County is adjacent to both Cook and DuPage counties, and St. Clair County is adjacent to the greater St. Louis area. The fact that St. Clair County had one of the lowest education factor scores in the state might be reflected in local attitude toward the support of public day school programs, particularly if nearby facilities are accessible. In McLean County, the third nonproviding high-expectancy county, there were no public day school classes for the deaf, but four classes were operated by Illinois State University. The educational needs of deaf children in McLean County seemed to be met by these classes.

It may be possible to draw several generalizations from the findings in these three counties. First, geographic proximity of counties with urban centers and ongoing programs for the deaf may tend to preclude the development

Figure 1

Expectancy Index of Services for Deaf in Illinois Counties



(Chalfant, 1967)

of public school classes for the deaf in adjacent high-expectancy counties. Second, the presence of supportive services, such as university training programs in audiology or deaf education, is another factor that has implications for organizing day school classes for the deaf in public schools. University centers provide greater accessibility to diagnostic and evaluative services and may stimulate the development of public school classes, particularly if students receive practicum in the public schools, while a university laboratory school which meets local needs may suppress the development of public school classes.

Adams and Tazewell Counties were the low-expectancy counties which provided classes. Geographically, Adams County has the only large population center (Quincy) on the west central side of the state. The surrounding countryside is sparsely populated with a scattering of small towns. For a number of years, Quincy has been the site of the Quincy Youth Development Project, which has been financed by the Moorman Foundation and contributions from other sources. This additional support is not reflected in the financial ability factor. The attention focused on Quincy, as a result of the Quincy Youth Development Project, combined with additional funds and the fact that Adams County is borderline low-expectancy may explain the presence of classes there.

Tazewell County had low but positive scores in the Urban, Education, Financial Ability and Population Growth factors and was located in a standard metropolitan statistical area. One day school program for the deaf was provided by Tazewell County despite the fact that 31 nonproviding counties had Index scores equal to or higher than the Tazewell Index score. The impetus for organizing the class seems to have originated with two teachers of the deaf who resided in the county together with a very cooperative superintendent. The availability of trained personnel seems to be another critical factor in establishing day school programs.

In summary, the Expectancy Index can be used:

(a) to identify those counties which may or may not be expected to have the necessary resources for program support;

(b) to provide a crude administrative differential diagnosis of the factor assets and deficits of cities, counties, or states;

(c) to aid State Boards of Education, Advisory Committees or State Offices of Education personnel in studying resources within the states, and in planning state-wide, county or multi-county special education programs; and

(d) to conduct comparative intra-state or inter-state studies of the effectiveness of different administrative approaches and legislative provisions.

Mobilizing Community Resources Through Regional Centers

The concept of the regional center offers one approach toward resolving many of the demographic and economic problems inherent in establishing day school classes for hearing impaired children. Cooperative programs between school districts or counties offer several advantages. For example, joining together two or more school districts or counties can increase their pupil population base and provide sufficient numbers of hearing impaired children to justify needed services. Being a contract of policy, a cooperative program is more assured of: (a) being both continuous and stable; (b) reducing the per-capita cost for the program; (3) providing for shared space and facilities; and (d) creating a situation which will attract competent staff and supervisory personnel.

There is a need, however, for "action research" to demonstrate the efficacy of innovative administrative arrangements such as the Regional Center. The United States Office of Education has recently awarded a grant to the Champaign Community Unit 4 Schools to plan and develop a Regional Center for hearing impaired children. The Center will serve a 16 county area in east-central Illinois. This is basically a rural area. The Regional Center will include such things as:

1. A combined residential-day educational facility for children from preschool to age 21.
2. A program of early identification.
3. A regional diagnostic and evaluation center, including longitudinal evaluation.
4. A source of recommendations concerning treatment.
5. Provisions for remedial education, language problems, communication disorders, and learning disabilities.
6. Regular home visitation.
7. Locally based nursery classes for young deaf children.
8. Pre-vocational and vocational counseling.
9. An interim program for severely hard of hearing children who require intensive work during part of their school years.
10. A practicum site for training future teachers.
11. A research facility.

This regional center will provide a population base of approximately 190,000 children. It may be anticipated that there will be approximately 130 deaf children in this area who will be served in at least 20 classes which are homogeneous for effective teaching, including services for multiply handicapped deaf children. A program of this magnitude will doubtlessly attract a highly trained staff and make it possible to employ full-time supervisors. Curricular and extra-curricular interaction between deaf and hearing children should be increased, as should home contact with the child and ties between the child and the community.

If the Regional Center is successful, it well could prove to be a model for establishing six or seven additional centers in the state. It is important to note that the Regional Center project was jointly planned by staff from the State Department of Education, the University of Illinois, and the Champaign Public Schools. This kind of cooperative planning is essential if states and local school districts are to mobilize fully the needed resources for establishing day school programs for hearing impaired children.

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Problem Three

SUPERVISION OF PROGRAMS AT STATE AND LOCAL LEVELS

Hazel Bothwell *

There are three critical points in the establishment of programs for children with hearing impairment which seem to demand the supervisory responsibility of qualified educators. These are: (1) the administration and coordination of the total educational program at the state level; (2) the supervision of the total educational program at the local level; and (3) the team educational follow-up of the identification process for hearing impaired children.

It is the purpose here to direct attention to:

1. The complex problems which have limited the development of adequate special education programs and have prevented the necessary supervision.
2. Review steps being taken toward the immediate improvement of programs through adequate supervision.
3. Outline current developmental plans for the establishment of quality programs for hearing impaired children on a statewide basis.

Problems Limiting Development of Adequate Programs
(Using Illinois as an Illustrative Case)

Education -- These problems are basically two: education and conservation. Illinois is one of nine states which place the responsibility for education of hearing impaired children with an educator of the hearing impaired. The Illinois Department of Special Education maintains that this special educator is qualified for this educational responsibility for two specific reasons. First, he has had the opportunity, because of his training and experience, to observe and study the day-to-day learning process of hearing impaired children from preschool age to adulthood, and, second, he has also acquired a thorough knowledge of educational facilities. For these reasons, he is able to make educational judgments about the needs of children and to assist in the development of needed programs and services.

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In general, educators agree that a sound educational program for hearing handicapped children must have: (1) homogeneous groupings of children according to degree of hearing loss, age and educational achievement, and (2) continuity in the program from early childhood through the high school period. Such programming implies that there also must be a planned program of identification and hearing conservation, thorough diagnostic evaluation, and a competent supervisory and supportive staff in all necessary disciplines.

Illinois began to take a critical look at its programs in 1960 and was faced with the following facts. During the 20 years of special education in Illinois, no school district had been able to develop an adequate program for hearing impaired children. Despite program expansion and the undeniable success of some children, there were many inadequacies. Children were poorly grouped; the program lacked continuity; and classes were scattered. Classes in Chicago were located in 18 schools without regard to the most effective program development. In the rest of the state, 387 children were enrolled in 53 classes located in 34 schools in 29 communities. Employment of teachers could not keep pace with enrollment and many classes were staffed by unqualified teachers. In the downstate area, one-third of the teachers were inexperienced or new to the state, and in all programs supervision by a qualified experienced teacher of the deaf was virtually nonexistent. To compound this situation further, five other agencies also provided educational services and there was only limited coordination among any of these programs. (See Chart 1)

Hearing Conservation -- Paralleling the problems in education were equally serious problems in the areas of identification, diagnosis, treatment and referral to education. Despite knowledge of the critical influence of these services upon educational success, no organized plan had been established to incorporate these necessary provisions.

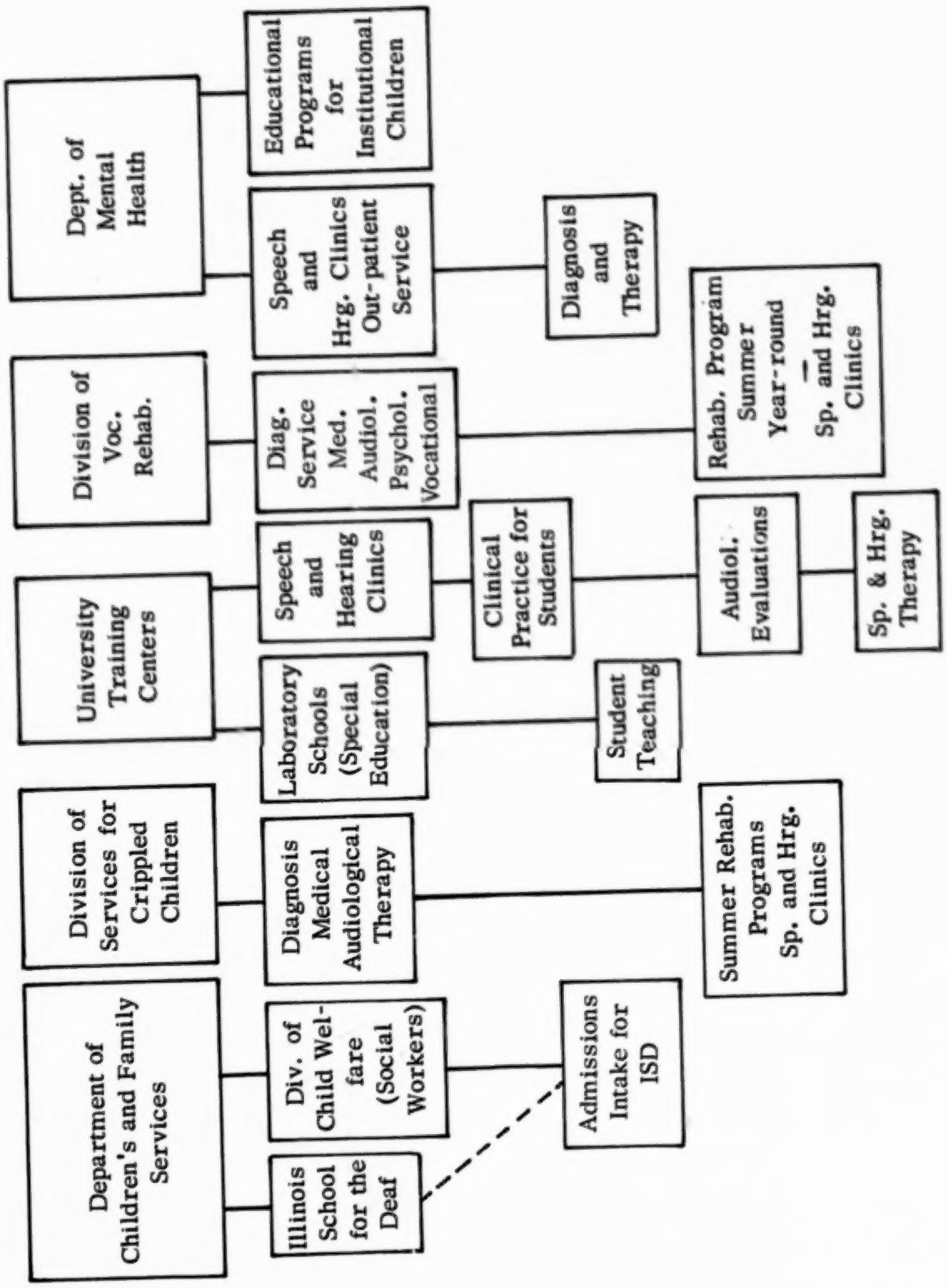
A questionnaire survey, in which the State Department participated, was conducted in 1961 by the Illinois Commission for Handicapped Children in an effort to determine the extent and coverage of hearing conservation programs for school age children.

The following findings are important for they represented the 1,758 reporting school districts:

1. Over 50 percent of the districts did not have regular screening programs.
2. There were no statewide standards for the regularity and method of testing.
3. Testing was done by individuals representing ten occupations and combinations of occupations.

Chart 1

State Agencies Offering Educational Services


Department of Children's and Family Services
Illinois School for the Deaf
Div. of Child Welfare (Social Workers)
Admissions Intake for ISD
Division of Services for Crippled Children
Diagnosis Medical Audiological Therapy
Summer Rehab. Programs Sp. and Hrg. Clinics
University Training Centers
Laboratory Schools (Special Education)
Student Teaching
Speech and Hearing Clinics
Clinical Practice for Students
Audiol. Evaluations
Sp. & Hrg. Therapy
Division of Voc. Rehab.
Diag. Service Med. Audiol. Psychol. Vocational
Rehab. Program Summer Year-round — Sp. and Hrg. Clinics
Dept. of Mental Health
Speech and Hrg. Clinics Out-patient Service
Diagnosis and Therapy
Educational Programs for Institutional Children

4. 21 percent of those testing had no training.
5. 66 percent of the test equipment was not calibrated.
6. 10 percent of the districts did not notify parents or physician when child failed the tests.
7. Only 33 percent of the persons making educational recommendations were qualified by education and training to do so.

It is also important to note that in no program did an educator of the deaf and hard of hearing participate in recommending the educational follow-up. It would seem that the educational specialist has not assumed his responsibilities in the identification process nor had he interpreted this area of concern to school administrators.

Supporting the above findings, the following examples suggest additional questions regarding educational follow-up:

One director of special education, who knew of no hard of hearing children in his district, reviewed the school records and found 121 children known to have hearing losses of more than 30 db, ASA, in the better ear. Grade placements were as follows:

3 in kindergarten
23 in first grade
10 in second grade
14 in third grade
23 in fourth grade
12 in fifth grade
9 in sixth grade
10 in seventh grade
4 in eighth grade
2 in ninth grade
6 in eleventh grade
4 in twelfth grade

A teacher questionnaire rated their performance as follows:

28 had failed one or more grades
43 were underachievers
28 were withdrawn
17 were social problems
11 were felt to be participating members of their classes

In addition, nine children wore hearing aids, but their performance is not differentiated.

* * *

Reported in Health Conditions of Children and Mothers in Chicago and Suburban Cook County, published by the Welfare Council, there are statistics on hearing losses from a Head Start program. This reports: "the number of children reviewed for this defect--17,115; number of defects--943." Of this group, one child is known to have received educational follow-up.

* * *

The 1966 Quadrennial Census of Handicapped Children in Illinois, ages 3-21, reported public school deaf and hard of hearing children as follows:

	Deaf	Hard of Hearing
a. Enrolled in special education programs	1027	1537
b. Not enrolled in special education programs	414	5092

In view of the fact that 83 counties have no educator of the deaf and hard of hearing, the question arises here as to who will assist with the educational follow-up.

* * *

State Department of Education enrollment records for 1965-66 show the following totals for hearing handicapped children:

Children enrolled in special education classes	2351
Children enrolled in speech therapy classes	1117

In view of the known problems in obtaining thorough evaluations of children on a functional basis, one questions whether children enrolled in both groups are receiving the total services necessary to meet their needs. Reports such as these indicate a need for various disciplines to participate in the identification and follow-up process, but at the present time these services and programs are not well coordinated.

Action Policy for Program Improvement

Education -- When the State Department of Special Education was fully informed concerning the problems, immediate steps were taken to improve the situation through policy changes in the Special Education Rules and Regulations. Chief among these changes were: (1) the establishment of minimum standards for the size of programs for deaf children, (2) a requirement for supervision of programs by teachers of the deaf, (3) provisions for evaluation of children, and (4) initiation of comprehensive long-range planning among school districts.

These provisions as outlined in the Special Education Rules and Regulations, Article III, Deaf and Hard-of-Hearing are controlled through reimbursements to approved programs.

Establishment of Programs:

> "Rule 3.07: Programs for deaf children shall have a minimum of six classes at the elementary level in addition to a preschool class.

"Rule 3.09: Programs for deaf children, having less than the minimum number of classes, will be approved for reimbursement only if these classes are part of a comprehensive, long-range developmental plan which has been approved by the Division of Special Education.

"Rule 3.10: Classes and services for hard of hearing children must be separate from those for deaf children. Appropriate classes and services for hard-of-hearing children may be: (a) self-contained, (b) resource, (c) itinerant."

Supervision:

"Rule 3.33: All districts having programs for children with hearing losses shall devise and present a plan for the supervision of this program by a qualified person.

a. A qualified supervisor of the deaf may be employed to coordinate the program on a full-time basis.

b. A qualified teacher of the deaf, who is teaching in the program, may be designated as head teacher and given responsibility for coordinating the program on a part-time basis.

"Rule 3.34: The plan of supervision must cover all phases of the program including identification of children, the diagnostic process, the instructional program, evaluation of progress, and parent education."

These policies launched a two-pronged attack on program improvement and supervision. As a guide to realistic planning, a population base of 500,000 was suggested. In order to include children living too far for daily transportation, a five-day week boarding home plan was developed through inter-agency cooperation.

The cooperation of school administrators in implementing these changes was excellent, and, within a one-year period, dramatic improvements had been effected. Consolidation of small programs reduced the number of units from 53 to 16, while at the same time, the expansion of facilities and the boarding home arrangements increased the enrollment nearly 100 children. More adequate supervision could now be given. Two programs employed fully qualified and experienced supervisors for the hearing impaired; eight appointed part-time supervisors; and three programs arranged for supervision from university teacher preparation centers.

At the present time, full-time supervisory staff may qualify under provision of the Rules and Regulations of Special Education. These provisions may be modified to take advantage of the development of improved education and training for supervisors of the hearing impaired now under consideration by the Special Education Advisory Council on the Preparation of Teachers of the Hearing Impaired. Current qualifications include preparation as a teacher of the deaf as well as the following:

> "Rule 14.07: The qualifications for an administrator of special education shall include:
>
> a. A certificate valid for endorsement for an administrative position which requires a master's degree and four years of successful teaching experience.
>
> b. A minimum of thirty semester hours in background courses from the following areas with work distributed in each of the five areas:
>
> (1) Child development
> (2) Tests and measurements and statistics
> (3) Curriculum development
> (4) Philosophical and social foundations
> (5) School administration and supervision
>
> c. A minimum of thirty semester hours in undergraduate or graduate work from the following areas with work distributed in each of the five areas:
>
> (1) Survey of problems in all areas of exceptionality
> (2) Special methods courses in the education of at least three areas of exceptionality as defined by the School Code of Illinois
> (3) Supervision of programs for exceptional children
> (4) Educational and psychological diagnosis and remedial techniques
> (5) Guidance and counseling
>
> "Rule 14.08: The qualifications for a supervisor of special education shall include:
>
> a. A certificate valid for endorsement for supervisory position in the area of his responsibility
>
> b. A minimum of a master's degree earned at an accredited college or university
>
> c. A certificate valid for teaching in the area of his responsibility, and two years of successful teaching experience in the area of his responsibility

d. A minimum of fifteen semester hours in background courses from the following areas with work in three areas including curriculum development and supervision:

   (1) Child development
   (2) Curriculum development
   (3) Philosophical and social foundations
   (4) Supervision

e. A minimum of fifteen semester hours in under-graduate or graduate work from the following areas with work distributed in not less than three of these areas:

   (1) Survey of problems in all areas of exceptionality
   (2) A sequence of three courses in the education of the area of exceptionality to be supervised
   (3) Supervision of programs for exceptional children
   (4) Educational and psychological diagnosis
   (5) Guidance and counseling

Evaluations of Children -- Supervision cannot be effective without adequate knowledge of the individual differences of children. Authorities emphasize the importance of special training and experience for the diagnosticians who work with hearing impaired children. The otologist, audiologist, psychologist, social worker and educator all have vitally important contributions to make to the total description of the abilities and limitations of individual children.

Despite this knowledge, no special training programs are available in the state at the present time, and few school diagnosticians have had specialized experience in this field. The implications in this limitation for all school children in Illinois are of concern when one notes that no hearing evaluation by a qualified person is required prior to placement of any child in special education classes or services for other handicaps.

As a start toward improving this service within the schools, a special two-week institute on hearing will be held in the summer of 1967 for school psychologists and school social workers who are employed in key positions. Part of the responsibility of the participants will be to develop recommendations for a plan of state coverage for the Office of the Superintendent of Public Instruction.

In addition, the Special Education Rules and Regulations also carry provisions intended to improve diagnostic services, although the ideal provisions have not yet been attained.

Special Education Rules and Regulations:

> "Rule 3.14: Prior to enrollment, an otological examination is required and subsequent examinations are required

> at least every two years unless this recommendation is modified by the otologist.
>
> "Rule 3.15: Prior to enrollment, an audiological evaluation from an approved hearing clinic is required and subsequent evaluations should be made at the request of the teacher, but no less frequent than every two years unless this recommendation is modified by the audiologist.
>
> "Rule 3.16: A visual examination is required when defective vision is suspected.
>
> "Rule 3.17: A psychological evaluation is necessary where there is a question of learning disability."

Hearing Conservation Programs -- In order to assist in the development of hearing conservation programs throughout the state, the Department of Public Health established, in 1964, a section on hearing conservation within the Department of Preventive Medicine. This program includes prevention, identification and referral for medical, audiological and educational follow-up. The person responsible for the hearing conservation section holds an Advanced Certificate in Hearing and has had experience in an educational program for deaf children.

A close working relationship now has been developed between the Department of Public Health, the Department of Special Education, and the school health services of the Office of the Superintendent of Public Instruction. Chief among their cooperative activities are the following:

1. The Office of the Superintendent of Public Instruction has endorsed the new recommendations for hearing conservation programs concerning hearing tests and criteria for failure and referral which were established by the Department of Public Health.
2. The Office of the Superintendent of Public Instruction endorsed the proposal of the Department of Public Health for the training of persons conducting hearing testing of school children.
3. The Department of Special Education has established a procedure for the educational screening of children with identified hearing impairment. This educational information is routed to the director of special education or to the educational supervisor of the hearing impaired for further educational follow-up.

Through these developments, a framework is evolving for a full sequence of services necessary to the successful management of the hearing impaired child, namely, early identification, medical and audiological referral, educational screening and follow-up. How well and how extensively these can be accomplished at the present time will depend upon the local services available and the quality of the staff in all of the participating disciplines.

Developmental Plan for Statewide Programs

Two important events occurred in 1965 to move forward more rapidly the total state program. At the request of key persons within the state who were concerned about the education of hearing impaired children, the Illinois Commission on Children appointed an Illinois Committee on Hearing Impaired. This interdisciplinary committee was charged with the responsibility of studying the needs and developing a plan of comprehensive programs and services for hearing impaired children on a statewide basis.

In a second action, the Illinois General Assembly, with the passage of House Bill 1407, expressed the determination of Illinois citizens that all handicapped children receive a fair opportunity for an education. Provisions of this law mandated that each county appoint a seven-man committee to devise and present a plan by July of 1967 to be initiated in September 1969 for the education of its handicapped children, and that such plan be in accord with the Rules and Regulations of Special Education, Office of the Superintendent of Public Instruction.

As an outgrowth of the study and cooperative planning within the state, considerable attention is now being directed toward the concept of regional programs for hearing impaired children. Such programming would combine the best features of strong school programs, formerly limited to schools for the deaf, with the best features of special education programs, specifically, the daily living experiences of home, school and community. In addition, these programs would permit coordinated services among all disciplines and agencies on a regional basis.

A project is now underway which will investigate the problems involved in the development of a regional program and the feasibility of establishing such programs throughout the state. The Regional Program is intended to provide for the needs of all hearing impaired children within the area, both deaf and hard of hearing, and to reflect the newest concepts and most effective practices in all facets of the program. One aspect of the program will provide a five-day week resident-day educational facility, with a concentration of classes centrally located, and a spectrum of programs and services throughout the area, these to include early identification and comprehensive hearing conservation services; home instruction and locally based nursery classes; parent education; various kinds of programs and services for hard of hearing children attending classes in their home communities; pre-vocational and occupational counseling; in-school or part-time work-study experience; recreation; and the application of new instructional techniques and materials in the educational program.

Fundamental to the success of this program is its supervision by an experienced and well-qualified educator of the deaf and hard of hearing and the employment of a full-time supportive staff of audiologist, psychologist and social worker, each qualified in his own field and with additional professional preparation in working with hearing impaired children. Coordinated with this program would be the facilities of the university including the teacher preparation center, the facilities of the Illinois School for the Deaf, the hearing conservation services of Public Health, and of Vocational Rehabilitation as well as the services of other state and local agencies and resources.

The State of Illinois is no longer satisfied with minimum standards for programs for hearing impaired children, but now expects quality. Regional programs might prove to be the answer. There are many unsolved problems related to the establishment of such programs. High costs, lack of a workable administrative structure, lack of building space, and shortages of personnel in pertinent disciplines all complicate the picture. These critical problems now are being studied. Provisions of the mandatory legislation, the interest and increased understanding of persons throughout the state, and the study of the Illinois Committee on Hearing Impaired reinforce the possibility that the right of hearing impaired children to receive an adequate education will be effected.

Summary

One of the major problems related to children with hearing impairment is the lack of supervision of educational programs and services. The combined resources in the State of Illinois are being utilized to improve the situation through:

1. A change in the role of the state consultant from one of direct supervisory service to local districts to the functions of administration, policy making and inter-agency coordination.
2. Required supervision of local programs by qualified educators of the deaf with defined responsibilities.
3. Development of standards for programs which will permit adequate supervision.
4. Coordinated efforts in the hearing conservation program with delegated responsibility for the educational screening and educational follow-up.
5. Cooperation of state agencies in the development of comprehensive services to hearing impaired children, of which education is a part.

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Problem Four

SUPERVISION OF CLASSROOM TEACHERS

Evelyn M. Stahlem [1]

By the passage of Public Law 87-276 in 1961 and Public Law 88-164 in 1963, support for the preparation of a supply of well educated teachers of the deaf became a national responsibility. By providing stipends for qualified young people entering educational programs, the government has demonstrated its recognition that the most important single factor in the education of deaf children is a competent teacher. It is axiomatic that the caliber of teacher education has great impact on the children being instructed, and this could not be more true than it is in teaching the deaf, which is a highly specialized perceptive type of teaching.

The National Conference on Preparation of Teachers of the Deaf at Virginia Beach, Virginia, in March 1964, offered those in attendance not only increased awareness of the problems facing the profession but also the opportunity of facing the future with recommended guidelines for the establishment of teacher education programs and for the evaluation of those already in existence. Strong emphasis was placed upon the inclusion of a common core of preparation as a focal point which would pervade all areas of specialization.

The Council for Exceptional Children, in its Professional Standards Project Report, made recommendations similar to those of the National Conference on Preparation of Teachers of the Deaf. A core of knowledge was stressed and described in definitive terms. These recommendations, setting forth high but realistic goals commensurate with the technologic and scientific knowledge presently available, also provided sufficient flexibility to allow teacher preparation institutions to keep pace with new knowledge and experimentation in programming. [2]

After 20 years of active and continuous participation in the training of teachers of the deaf, it appears evident that the organization of content material into sequential and related courses is of prime importance. An additional key to an outstanding program is the provision for systematic and sequential opportunities for observation and practice teaching in well graded and well organized schools for the deaf over at least a consecutive two-semester period.

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[2] "Professional Standards for Personnel in the Education of Exceptional Children," page 16.

Those who are concerned with the mandate to educate deaf children entering the schools cannot help but be dismayed by the rapidly increasing number of children with severe concomitant disabilities. Rarely is it possible to obtain teachers with dual preparation. It has become necessary to reorient the traditionally trained teacher of the deaf to meet these problems despite the lack of specific and structured guidelines. This serious and critical situation is a challenge to teacher training institutions, if these new needs are to be met.

According to the 1967 Directory of Services for the Deaf in the United States, published by the American Annals of the Deaf, there is a total of 54 centers preparing teachers of the deaf. These centers will graduate 527 teachers in June 1967. [3] This number of new teachers does not constitute a plethora of recruitment possibilities, but neither does it represent the paucity facing schools and classes for the deaf only several years ago. Then the greatest concern was to find enough persons, trained or untrained, to staff teaching positions.

While there is considerable agreement as to what constitutes a sound and appropriate program for preparing teachers of the deaf, based upon the recommendations previously mentioned, no specific criteria have been formulated which would serve as guidelines in the recruitment and selection of teachers of the deaf for both state schools and local day programs.

Teacher Recruitment and Selection

In any discussion on the subject of recruitment and employment of teachers of the hearing impaired, many questions immediately arise. There are problems which must be faced by teachers, the schools, and by the state departments of education. Questions related to the teachers themselves will include the following:

What motivates a teacher to make application to teach in a certain school? Is it salary, size of the school, availability of supervisory support, reputation of the school, climate, or proximity to attractive recreational areas? Or, is it a matter of convenience, or the ease of gaining employment because of a lack of any standard selection procedures?

Schools have such questions as these:

How can the best qualified teachers be secured? Is it by means of a high salary scale, a rigid selection procedure involving written and oral examinations in the area of the deaf and the passing of the National Teachers Examination? Is it by evaluation of education, experience, and personal interviews? Or, is it by eliminating some or all of the examination procedures and employment based upon application forms and recommendations?

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[3] Doctor, P. V. (Editor), Directory of Services for the Deaf in the United States, American Annals of the Deaf, Vol. 112, No. 3.

State departments of education also have questions:

How can one insure quality teachers and a quality education for the hearing impaired children of the states? Is it by requiring special state certification to teach the deaf? Is it by limiting class size, or by requiring a supervisor for a specified number of teachers to insure support and leadership for both the experienced teacher and the novice? Or, is it by relaxing restrictions and being permissive in these areas?

All of these questions must be faced vigorously and forthrightly. Only when answers have been found through discussion and interaction, research, or other means, will it be possible to establish guidelines. A dearth of research exists in this critical area. Although it was not possible to undertake a definitive investigation in preparation for this paper, a brief questionnaire on examination procedures for prospective teachers was sent to the 15 cities which make up the Research Council of the Great Cities Program for School Improvement, including questions relevant to state and local school districts. The results of this survey are shown in the following tabulation:

Analysis of the Questionnaire on Examination Procedures for Prospective Teachers of Hearing Impaired Children Sent to the 15 Cities Comprising the Research Council of the Great Cities Program for School Improvement

1. Are teachers of Hearing Impaired Children required to possess special state credentials to teach such children in your public schools?

	Number	Percent		Number	Percent
YES....	14	93	NO.....	1	7

Pertinent comments which modified or clarified Question 1:

(a) The respondent from one city states that the local certification is accepted by the state.

(b) From two cities it was reported that certification in either elementary or secondary education is required in addition to certification in the area of specialization.

2. Does your city school district require a written examination in the area of specialization for prospective teachers of Hearing Impaired Children?

	Number	Percent		Number	Percent
YES.....	6	40	NO.....	9	60

Additional information received concerning Question 2 from four cities showed the following modifications represented by one city each:

(a) An examination in general education.
(b) An English usage examination.
(c) The National Teachers' Examination if specialized preparation was not completed.
(d) The National Teachers' Examination with a score of 500 as well as the Optional Examination in the area of the deaf.

3. Does your city school district require an oral examination in the area of specialization for prospective teachers of Hearing Impaired Children?

	Number	Percent		Number	Percent
YES.....	7	47	NO....	8	53

Explanatory comments concerning personal interviews were:

(a) In two cities, personal interviews are required.
(b) In one city, an interview by committee is required if the applicant did not rank in the top third of his class.
(c) In one city, interview by the principal of the school for the deaf is desirable.

4. Does your city school district make an evaluation of training and experience in the area of specialization for these prospective teachers?

	Number	Percent		Number	Percent
YES.....	13	87	NO....	1	7
No response	1				

Additional information given was:

(a) In one city, review of the application by principal of the school for the deaf is required.
(b) One respondent stated that prospective teachers are placed on an eligibility list, and it is assumed that an evaluation is the basis for this placement.

In summarizing the results of this survey, it can be stated that unanimity is approached in relation to mandatory state certification for teachers of hearing impaired children as well as in the area of evaluation of prospective teacher education and experience. On the subject of oral and written examinations to determine prospective teacher competence, under 50 percent use these techniques. It is noted, however, that there is variety reported in teacher selection procedures even for this small sample. With such disparity existing in a sampling of only 15 cities, even greater diversity might be anticipated if a larger sample were investigated. Admittedly, the most rigid review and screening procedures do not guarantee absolute teacher competency, since all positive qualities are not measurable by tools and techniques available. On the other hand, establishment of and adherence to standards in teacher selection is a firm basis upon which to build a productive educational program. If teacher selection procedures provide for state certification in the area of the hearing impaired; if teacher preparation has followed the guidelines as formulated by the Virginia Beach Conference and by the Professional Standards Project Report of the Council for Exceptional Children; if oral and written examinations in the area of the hearing impaired have been passed; and if references and interviews have been satisfactory, certainly prediction for successful performance as a teacher would be indicated. Observation of a prospective teacher in a classroom situation would be a further check, if such were feasible.

Before leaving the subject of the recruitment and selection of teachers, a comment from the consumer's viewpoint is indicated. Experience suggests that the use of requirements and safeguards discussed do not appear to be a deterrent to prospective teachers in making applications for teaching positions.

It should be noted that the past decade has seen a steadily increasing salary scale for teachers, and with it has come greater capability of maintaining a home and family. Increased publicity has been focused upon the education of the deaf; federal monies have provided not only for research but also for promotional opportunities and program expansion. These factors no doubt have contributed to more men being attracted to the profession of work with the deaf as well as to their entering the elementary field. This situation is a salutary one since it provides a better balanced staff.

Supervision

The mortality or turn-over rate among teachers of the deaf is estimated at five percent. Possible reasons for leaving the field or for mobility within the field are: retirement, pregnancy, family responsibilities, higher salary schedules, promotions, a desire to live in various parts of the country, joining a husband who is relocating, further education, lack of supervisory support, and difficulties encountered in working in very small and ungraded programs.

The view has been expressed that educators of the deaf have a responsibility beyond the ordinary to provide a quality education for children with a severe organismic deprivation. The ultimate goal must be to assist and to equip the deaf so that they may be able to maintain the best possible ecological balance throughout a lifetime. Added to the interrelationships of children with a dedicated, well educated, and behavior oriented teacher, there must be the support, encouragement and leadership provided to the teacher by supervisory personnel. Selznick (1966) [4] has defined the supervisor of instruction as the professional person whose primary role is the improvement of the teaching-learning environment. This is a most satisfactory definition with a clearly enunciated concept of responsibility.

At the present time, it appears that the most critical problem indigenous to day school programs for the hearing impaired may be the lack of supervision. Figures obtained from the Bureau for Physically Exceptional Children, California State Department of Education, indicate that there are only 11 full-time supervisors for the 75 day programs for the deaf in California. And, this is a situation not unique for the State of California. It is true, however, that the marked increase in the enrollment of deaf children in special day classes in local public schools in California has brought into focus there the important and urgent need for qualified and skilled instructional supervision for these classes. Building principals, district administrative specialists, and other personnel in a typical school district increasingly express a concern for leadership. They recognize that, without educational leadership, they cannot bring to the special day class program in their districts the professional knowledge and skills demanded by the complications and implications for learning that the sensory handicap of deafness poses. [5] Contributing to this situation is the fact that there is a comparatively small number of hearing impaired children in a given school district. This small number contributes to a low visibility factor when estimating the most needed requirements of that district. Needless to say, local school boards must be sold on the urgency of the need for supervision of the hearing impaired.

Willenberg (1964) has pointed out that supervision of instruction in special education programs is a major administrative problem. [6] Connor (1961) has identified expert supervision of instruction as a critical feature of a quality special education program. [7] A quality program needs a quality supervisor, but actually, definitive criteria for the competencies required have found limited adherence. Professional qualifications and preparation for a supervisor of programs for the hearing impaired might well include a Master's degree, specific preparation in supervision, certification in the area of the deaf, and progressively responsible experience of at least five years in a well organized school for the deaf. Desirable additional preparation should include courses, seminars and supervisory internship in this particular area of exceptionality. Preparation and experience are of primary importance although personality, character and leadership qualities should not be overlooked.

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[4] Selznick, H., "Administration and Supervision Considerations in Programming for the Mentally Retarded."

[5] Griffing, B. L., "Status and Function of Supervisors Serving Special Day Class Programs for Deaf and Severely Hard of Hearing Children in California Schools," page 3.

[6] Willenberg, E. P., "Organization, Administration and Supervision of Special Education."

[7] Connor, L. E., "Administration of Special Education Programs."

The supervisor must mold into a compatible, cohesive working whole a staff that encompasses experienced teachers with many years of service and tenure, as well as teachers of limited experience and others just entering the field. Differing philosophies, methodologies and teaching techniques invariably will be represented. A wise supervisor will capitalize on differences in order to bring variety and richness into the achievement of ultimate goals.

Teachers of the hearing impaired play many roles, including: (1) develop and implement a program for language and communication skills improvement; (2) develop and implement an on-going program for improvement of subject area skills; (3) serve as purveyors of accumulated knowledge; and (4) be consumers and practitioners of diverse teaching techniques. To plan with, to coordinate and to guide teachers in effectively carrying out these roles is the responsibility of the supervisor. Perhaps, the greatest service an enthusiastic and inspired supervisor can perform for teachers is to help them feel that teaching the deaf is at one and the same time the most demanding, the most exciting, the most exacting, the most fascinating and the most rewarding of all professions.

The challenge now is to sweep away the accretions of tradition and to scrutinize objectively the educational problems and procedures at the operational levels of programs for the hearing impaired. It is in this area that research could provide needed information and practical solutions. There is a need to think of needed research specifically relevant to day school programs and to the pupils and their communities with which the instructional programs must relate.

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Problem Five

EARLY IDENTIFICATION OF HEARING IMPAIRED CHILDREN

Janet B. Hardy *

The identification of children with communication problems is a multidisciplinary affair. Involved in this activity are physicians, educators, audiologists, nurses and, above all, parents. In order to do the job well, better education and training are needed. The biggest gap in education is at the parent level; often parents simply do not have enough information about the normal developmental stages of infants and young children to recognize when their children are deviant. Many physicians and other professionals are also lacking in this essential information, and they falsely reassure parents that "Johnny will grow out of it." Modern pediatric education, however, is stressing child development.

By the time children reach eight to ten years of age, a sizeable percentage of them can be expected to manifest problems in some aspect of the communication process. The estimates as to the size of this deviant group vary widely from about 10 percent to perhaps 30 percent depending upon the population considered, the age of the children, and whether the definition includes written language skills as well as hearing, oral language and speech.

The Immediate Challenge

The identification of children with problems is particularly crucial when faced with the urgent challenge presented by the large number of handicapped children left in the wake of the 1963-64-65 epidemic of rubella. The majority of these children are now between one and three years of age, and it is estimated that there are between 15,000 and 20,000 of them across the country. If available data are a useful index, approximately one-half of the affected children have hearing problems. The solution to the problems involved in meeting the medical, educational and social needs of these children will not be easy. The solution will be costly and must be sought at a time when space, money and properly qualified personnel are all in short supply. The answers to these problems, if creative, may well have implications for children with handicaps from other causes and for long after the rubella problem has receded.

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Rubella

Rubella, better known as German measles or "three-day" measles, is generally a mild infectious disease of children and young adults. In these age groups it seldom results in serious illness or death. The disease may be manifest by rash, mild fever, sore throat, swollen lymph nodes and arthralgia (painful joints), or it may be subclinical and not apparent, without characteristic symptoms. Except at the time of an epidemic, the diagnosis is a laboratory one based on the recovery of rubella virus or the identification of a significant rise (or fall) in rubella antibody titers. There are a number of other viral diseases clinically indistinguishable from rubella (Hardy, 1966). When a mother is infected with rubella just before or during the early part of pregnancy, the virus may be carried across the placenta, and is capable of causing severe disease and even death in the fetus. The virus may persist in the infected fetus throughout pregnancy and for many months after birth. Infants excreting the virus are infectious to susceptible contacts.

Fetal infection during the first trimester of pregnancy may result in severe and multiple handicaps in a high percentage of children, considerably in excess of 50 percent. Infection between the tenth and twentieth weeks of gestation may also result in serious handicaps, but the risk is less and the nature of the handicaps somewhat different. For example, cataracts are not seen following rubella which occurs after the eighth to tenth week of gestation. Hearing problems, mental retardation, small head size, and growth failure are the more common sequelae of second trimester rubella. While many "rubella" babies are of small birth weight and may be classified as premature, some babies infected during pregnancy may appear normal at birth and only subsequently manifest signs and symptoms of residual damage. One case illustrating this is L. P., whose mother had rubella at 60 days gestation. This baby appeared entirely normal and weighed 3015 gms. (6½ lbs.) at birth. Rubella virus was cultured from her throat at birth, and again at four and five months of age. At 18 months, she was noted to be retarded in development and in physical growth, and she had a small head. At 24 months she had a cardiac murmur characteristic of peripheral pulmonic stenosis.

Congenital infection may result in a broad spectrum of disease. The percentage of distribution of rubella related defects in a large group of children where the diagnosis was confirmed by the isolation of rubella virus, and/or the demonstration of specific serum antibody between four and 14 months of age is shown in Table I. It may be noted that 50 percent of the children have hearing problems.

TABLE I

Characteristics of 199 Children with Virologic and/or Serologic Evidence of Congenital Rubella*

Type of Abnormality	Percent
Visual	20
Cardiac	35
Hearing	50
Development	54
Head size –	
Small	60
Large	6

* 104 of the children were born between October 1964 -- February 1965.

In addition to the residual characteristics noted in Table I, other manifestations of congenital rubella have been identified. These are related primarily to the chronic infective process which continues over a period of many months rather than to the interference with normal patterns of organogenesis per se. Chronic infections and other secondary defects identified with congenital rubella were reported in the results of the Johns Hopkins Study. These manifestations of congenital rubella were:

Chronic Infection	Secondary Defect
Pneumonitis	Low birth weight
Hepatitis	
Thrombocytopenia	
Anemia	
Meningoencephalitis	Microcephaly
Gastroenteritis	
Failure to thrive	Small body size
Chronic renal disease	
Hearing defects	

The above findings are in general agreement with those of other groups studying the problem. For example, a group in Houston, Texas (1967) reports that only 18 of the 100 children in their rubella study had normal hearing at 18 months, 29 were definitely abnormal and 17 were suspect. Twenty of the original 100 had died and 16 had been lost to follow-up. This means that only 25 percent of the 74 children whose hearing was studied had normal hearing.

Studies reported prior to the isolation of the rubella virus in 1962 and the subsequent development of serologic diagnostic tests show quite a variable risk of malformation or handicap. The Australian workers (Gregg and Swan, 1941) reported an approximately 80 percent risk attendant upon first trimester rubella in children followed to school age after the 1939-40 epidemic in that country. In contrast, a risk of only approximately 10 percent in children followed to age one year was reported in a study carried out over a five-year period in New York (Siegel and Greenberg, 1960). This variability undoubtedly is due in part to confusion, on a clinical basis, with diseases caused by other viral infections which do not have devastating effect on the fetus.

A summary of the rubella problem in terms important to educators includes the following:

1. There was a severe rubella epidemic in 1963-1965. The result will be many thousands of handicapped children requiring education.
2. The handicaps manifested by these children result from a chronic generalized infection involving many systems and functions. Children with congenital rubella usually have multiple handicaps, not merely a simple problem of failing to hear. Therapy and education must be geared to the total needs of the child, not to his hearing problem alone. Amplification with a suitable binaural hearing aid is often very helpful.
3. Rubella is a highly infectious disease and the fetus may be damaged even in the absence of the characteristic rash in the mother and after administration of gamma globulin. Pregnant school teachers were a special risk during the epidemic when the disease was rampant among their students.
4. Special audiologic studies in some of our rubella children have indicated that the process is not a static one. While there is evidence that much of the auditory pathology results from cochlear damage, there now is evidence also that other factors may play a role. For example, (a) middle ear disease, presumably on the basis of rubella infection, can add to the degree of hearing impairment; (b) the marked delay in myelinization of cranial nerves observed in congenital rubella must surely decrease the efficiency of electrical transmission of sound waves; and (c) the vascular and other lesions in the brain, which are so commonly seen in children dying of congenital rubella and meningoencephalitis, as well as small head size, cerebral palsy, seizures and mental retardation not infrequently seen in children who survive, are all indicative of the widely disseminated nature of the disease.
5. Work is actively progressing on the development of a vaccine so that future rubella epidemics may be prevented.

The Nature of Communication

An understanding of the basic nature of the human communication process is important to the identification and remediation of children with hearing defects. This process is analogous to a computer system. The ear represents the main input channel; the cerebral cortex is the area responsible for data processing; and speech or written communication is the main output. The auditory pathways between ear and cortex are extensive and complex, as are the neurophysiologic and neuromuscular mechanisms which mediate output. It is important to remember that hearing and listening are learned behavior, as is speech. These functions are superimposed upon more primitive, basic, largely reflexive responses and functions vital for survival, such as the ear alerting to possible danger, involvement in speech, breathing and swallowing.

The human computer has enormous reserve capacity as well as ability to monitor itself. This self-monitoring is an important tool in learning because the child learns to talk as he hears, and he does this in a normal developmental pattern or sequence. Since he starts learning early, the early identification of factors which may interfere with the development of normal patterns of communication is important so that remediation, if required, may start early.

Etiologic Factors in Communication Problems

Some etiologic factors in communication disorders of young children are worthy of note here. In order to conserve time, these are shown in Table II. It should be pointed out that knowledge of possibly adverse prenatal and perinatal factors are important in development of a high risk register. It is worth noting that some problems are acquired and are thus not wholly amenable to the risk register technique.

Methods for Identifying Communication Problems

There are a variety of possible approaches to the problem of identifying hearing impairment at an early age. Among the four million children born in the United States each year, there are many with real or potential problems in communication, but no really "solid" estimate as to the number of these children. The estimates vary, depending upon criteria for defining the handicap, the methods of survey, the population surveyed, and the age at which the children are screened. Among the methods and procedures used for identification of hearing impairment are the following:

Risk Register
Developmental Questionnaires
Screening -- Neonatal
Infant
Preschool
School

Evaluation of children with deviant responses

1. Pediatric - neurologic - ophthalmologic
2. Audiologic - otologic
3. Psychometric - developmental
4. Social

Diagnostic summary and parent conference
Diagnostic teaching where diagnosis unclear

TABLE II

Etiologic Factors in Communication Defects

The Johns Hopkins Collaborative Study

Time of Occurrence	Factor or Insult
Preconception	genetic
Prenatal	maternal-fetal viral infection; drugs taken by mother; fetal hypoxia; prematurity-low birth weight
Perinatal	hypoxia/acidosis; mechanical trauma; hyperbilirubinemia; drugs given to infant; ?? noise
Postnatal	middle ear infections; upper respiratory infections; foreign bodies in ear; drugs; meningitis; encephalitis, mumps,. measles; trauma

Environmental Influences

(deprivation-lack of stimulation);
emotional problems;
mental subnormality

The concept of a Risk Register is a useful tool. It implies concentration of resources for those groups of infants among whom the yield in terms of of cases found will be greater. Babies with unusual risk of developing problems are identified on the basis of established criteria to the Public Health authorities at the time of discharge from the newborn nursery. Arrangements are made for a screening evaluation of these infants during the first year of life, and referral is made for definitive diagnosis and management. This is being done with success in a number of places in Great Britain, notably Aberdeen. This approach would seem ideal for certain areas in the United States and for certain population groups, such as, (1) Kansas, where some 50 percent of children are not seen by a physician during the first year and where there are only eight well baby clinics; and (2) Baltimore City, with its large Negro infant population, 80 percent of whom are dependent upon the City Health Department for child health supervision; and (3) the Comprehensive Care Units for "poverty children" in a number of cities, which are supported by the Children's Bureau, Children and Youth Program.

A number of developmental questionnaires have been prepared which are directed toward sampling auditory and language behavior at various age levels during the first few years of life. It has been demonstrated quite clearly that even lower socio-economic mothers are reliable reporters on recent auditory behavior, if the questions are simple, direct, and framed in a way that they can understand. Failure to attend to soft sounds, to develop orienting reflexes, and to recognize certain specific environmental sounds are all useful indices during the first year. Failure to progress in language development and in the development of intelligible speech is important during the second year. Anderson and associates, Denver, Colorado (1963) have produced a very useful developmental questionnaire. A Johns Hopkins group, with the help of a workshop under the Children's Bureau auspices, developed a questionnaire specifically for language and hearing. (Hardy, W. G., 1967) Tools of this kind can be used in the physician's office, clinic, or at home by nurses or trained interviewers with the results checked by specialized personnel. Deviant children then can be referred for special diagnostic services.

There are a number of ways in which mass screening of auditory function and/or developmental status can be done. Among these are:

(a) Neonatal Screening -- Neonatal auditory screening depends upon the identification of a reflexive response to a sound stimulus, usually one of considerable intensity. This test is made on infants in the hospital nursery during the first few days of life. It is an attractive idea because better than 98 percent of all babies in this country are born in a hospital, and the test is simple, inexpensive, and can be done by volunteers after minimal training (Downs and Sterritt, 1964). The yield is very low, however, in terms of child problems identified, and there appears to be a real problem in terms of both false positive and false negative test results. Normal children may fail to respond; abnormal children, on the other hand, may give an adequate response. This has happened in a number of rubella children. Further research in methodology is required.

(b) Infant Screening -- This can be done with considerable reliability from four months of age on to about 14 months, using a modification of the Ewing method which utilizes distraction techniques (Hardy, et al, 1959), and Kevin Murphy's somewhat similar method. These procedures identify children who fail to respond normally to auditory stimuli in the speech range. The reasons for failure may be defective reception of the stimulus, defective perception and understanding of its meaning, and/or defective response mechanisms. Occasionally, failure to respond may result from total lack of interest in the stimuli and/or from illness or fatigue. Because the computer system is complex, defective operation in any one of a number of sites may produce failure.

Nevertheless, these screening techniques are useful procedures and can be carried out for children ages eight to 12 months quickly and easily by non-professional people after modest training (Volunteers, "The True Sisters in Baltimore City"). Children who fail twice on tests which are at least two weeks apart should be referred for more definitive evaluation, medical, audiologic and psychologic, if indicated. The results of infant screening for 1,176 children in the Johns Hopkins Collaborative Project in relation to other findings are shown in Table III.

TABLE III

Other Findings in Infants with Normal as Compared with Abnormal or Suspect Responses to Auditory Screening*

The Johns Hopkins Collaborative Perinatal Project

(1,176 Children)

Type of Auditory Response	Percent Distribution by Neurologic Status				Percent Premature by Weight
	Normal		Abnormal or Suspect		
	No R.I.*	Chronic R.I.*	No R.I.	Chronic R.I.	
Normal	74.8	6.8	13.1	5.3	
(1,074)	81.6		18.4		10.5
Abnormal or Suspect	16	26	43	15	
(102)	42		58		24

(c) Preschool Screening -- This type screening can be done for some 50 percent of three year olds (Eagles 1963) by using head phones and the pure tone audiometric sweep check on an individual basis. Play audiometry can be done with considerable reliability (Toronto Conference, 1964). A variety of tests using gimmicks, such as the Peep Show (Edith Whetnall, 1964), recorded calibrated language signals (Collaborative Perinatal Study, NINDB), may be used for those children who reject the head set.

Follow-up of Deviant Children

Screening programs are of little value when the children who fail are not followed up. The purpose of a screening program is the identification of children in need of more definitive service.

A limitation to the development of screening based upon legislative fiat is that the program so frequently tends to break down at the level of follow-up. Limited resources are better spent when they are applied to the intensive and complete workup and rehabilitation of a few children, rather than devoted to identification only for many who may have problems.

Responsibility for Identification

Responsibility for identification of children with hearing impairments and communication problems is a multiple responsibility. Persons who share in this are:

Persons Responsible	Means
PARENTS	Recognition of deviant behavior
Pediatricians and G. P.'s	History and simple screenings
Public Health Authorities	Child Health care -- screening school health
TEACHERS	Recognition of deviant behavior
Specialists in Otology, Audiology, Neurology, Psychology, etc.	Specific -- definitive diagnostic procedures

As can be seen, there is extensive professional involvement, and some individuals fulfill more than one role.

In conclusion, dedication to helping each child achieve his maximum potential must be fortified by willingness to share information, to learn from one another, and to learn together how to do a better job.

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Problem Six

DIAGNOSTIC EVALUATION AND PLACEMENT

Robert Frisina *

The fundamental issue here was voiced when those persons responsible for this conference stated, "Hearing impaired children will continue to be placed in public school programs with or without the development of guide lines and superior programs for these children." The message emanating from the results of any comprehensive analysis of existing programs on a national scale come as no surprise. Unanimity exists regarding a general dissatisfaction with program organization and implementation on a nation-wide basis. Most would agree, too, that exemplary programs exist in pockets around the country. But more important is the recognition that much needs to be done if all hearing impaired youngsters are to be assured maximum educational opportunities.

Diagnostic Evaluations

Diagnostic evaluations must lead somewhere if they are to be useful to an individual. In order to lead somewhere, varietal systems of treatment must be available. Although much can be said regarding medical and psychologic treatment programs, the focus here is on the educational alternatives needed for hearing impaired children. The diagnostic evaluation phase, as might be expressed in the jargon of the electronic world, requires consideration of at least three human functions:

The Code for Input
The Code for Storage
The Code for Retrieval

Code for Input refers to information available for input. More specifically, it refers to information available outside the individual. The amount and kind of stimulation provided the individual, together with his personal abilities to deal with these sensory stimulations, will determine in large measure the forms in which his overall behavior will be shaped. Children from slums are shaped differently from children growing up on farms and those reared in suburbia. The characteristics of the verbal world in which these youngsters are reared are not the same; the value systems generated within these different communities are not the same. Information -- both content and form -- available among these groups of children varies widely. In short, environmental

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opportunities differ among individuals. The results and effects of hearing impairment superimposed upon these differences will demand multiple educational opportunities.

Evaluation of the family and home, understanding of the socio-economic conditions of the family, an appraisal of values and goals established within the family, and an understanding of the amount and kinds of exposure the hearing impaired child has within and outside the family, these are among the significant variables which we sometimes glibly subsume under the term, "the whole child."

Knowledge, skills, and methodology derived from efforts in the behavioral sciences are required for the assessment of the facet of the hearing impaired child, or information available for input. The labels most frequently attached to the professional members of the evaluation team who contribute to an understanding of this important area include psychiatrist, clinical psychologist, linguist, sociologist, educator, educator of the deaf, social worker, audiologist, and speech pathologist. Others will become more prevalent as information in the behavioral sciences is reorganized as a result of new information which is growing exponentially.

In this aspect of Code for Input, which deals with environmental influences, one could rank on a four-point scale the relative integrity and healthiness of a hearing impaired child's family life. For example, in the case of a low socio-economic hearing impaired child whose parents are separated, whose mother is on relief and must care for five other children, whose mother is illiterate and not particularly interested nor capable of doing anything extra for him, the Code for Input-Environmental would be ranked as a four. With a reasonable degree of certainty, one could conjecture there was a marked limitation in the practice effect in use of the English language. One could assume that consistent use of a wearable hearing aid would not occur, that the child could not regularly attend infancy and early childhood education programs, and that few opportunities would be available for interaction with children outside his restricted environment. At the other end of the scale one would find the child from the upper-middle socio-economic level, with parents who are educated beyond high school and who relate well with their hearing impaired child and his two siblings. One would find parents who actively play with the child and afford him opportunities to practice the English language, parents who take him on auto trips to see the airport, his grandparents, his cousins. This case might well rank one in the environmental area of Code for Input.

The Code for Input also includes the status and integrity of the sense organs. Of critical importance in diagnostic evaluations leading to placement of hearing impaired children is the end organ of hearing. Functionally, this is sometimes referred to as the inner ear or the "hearing" part, as opposed to the "listening" part of the auditory system. The physical, biologic, and behavioral sciences have provided fundamental knowledge related to the structure and function of the inner ear and the eighth nerve. On the diagnostic side, the primary evaluation team members required for the clarification of status of the hearing portion of the auditory mechanism of hearing impaired children are the otolaryngologist and the clinical audiologist. On the basis of a comprehensive auditory test battery, it is also possible to rank on a four-point scale the general integrity of the auditory system, particularly with respect to the inner ear and eighth nerve. The role hearing is likely to play in receiving speech from others, alone or in concert with lip reading, and the extent to which hearing allows the monitoring of his own voice determine where on the scale from one to four hearing status falls.

The Code for Input, therefore, is seen to consist of two very important components. The first relates to the quantity and quality of environmental stimulation available to the individual. The second involves the anatomical and resultant physiologic status of the input transducer known as the end organ of hearing. The respective rankings in each of these two components begins to say a great deal about the immediate needs of a given child. A "2-hearer" with a ranking of "1" in the environmental area requires quite different consideration from the child who might be classed as "2-hearer" and a "4-environmental."

Code for Storage is a second important function. Information storage, particularly verbal information, is made possible by the presence of the central nervous system. It is well known, however, that inner ear breakdown can preclude adequate perception of auditory verbal stimuli. Measurement of end organ function by the otolaryngologist and the audiologist is infinitely more precise and better understood at present than is how information is stored. Fundamental information concerning CNS function has emerged from widespread efforts in the physical, behavioral, and biologic sciences. Measuring CNS function for educational purposes in hearing impaired children has been performed most often by pediatricians, neurologists, educators, audiologists, psychiatrists, linguists, psychologists, and speech pathologists.

Code for Retrieval is the third aspect of this computerized human functioning. Analogs for the central nervous system have been proposed in the form of computers and other models. Yet, the Codes for Storage and Retrieval have not been broken. In the case of Retrieval, as is true for Storage, one must depend upon the physical, biologic, and behavioral sciences to provide working hypotheses in understanding the retrieval function of the brain. Short-term and long-term memory as well as abstraction of high-level verbal and mathematical systems are aspects of brain function that elude other than indirect description at this time. The professional examiners intimately concerned with the retrieval and output functions of hearing impaired children include such specialists as pediatricians, neurologists, psychologists, teachers of the deaf, speech pathologists, and audiologists.

At this point in time understanding of the interaction among these three major areas, arbitrarily classes as the Codes for Input, for Storage, and for

Retrieval, is weak. To admit weakness in understanding the full impact of the interaction among these is not to say there is not a sense of direction. Nonetheless, the state of the art does vary within and between types of practitioners dealing directly with hearing impaired children. What each attempts to do is to assess the status of the individual in somewhat specific areas of function, and then to predict needs and outcomes. Unfortunately, in too few instances are the findings of one examiner actively interrelated with his fellow examiners. The manner in which different examiners in various sections of the country cooperate on a day-to-day basis on behalf of a given patient leaves something to be desired. There are many reasons for this lack of comprehensive and integrated professional service to hearing impaired children, and the concern here is to consider ways of improving existing conditions which are less than optimal.

Manpower Needs

In order to increase the effectiveness of diagnostic evaluation services which lead to recommendations for placement, a fundamental problem is that of manpower. The recurrent references to clinical specialties evidenced in diagnostic evaluation of hearing impaired children include the pediatrician, the otolaryngologist, the audiologist, the neurologist, the teacher of the deaf, the psychologist, the social worker, and the psychiatrist. Those interested and actively working with hearing impaired persons constitute a number much too small for the national need.

Because of the manpower shortage, it is unrealistic at this time for each school system to have its own comprehensive diagnostic center. Pooling of resources is needed until adequate numbers of qualified personnel become available. A problem requiring attention is related to various means by which diagnostic services can be strengthened through sharing, pooling or reorganizing efforts at the local, state, and interstate levels. Is it possible and perhaps feasible to establish regional diagnostic centers attached to, or directly affiliated with, universities which have professional preparation programs in the medical, educational and allied fields enumerated above? It is possible that such regional centers might concentrate the limited number of professional specialists around the United States in such a manner as to develop professional teams that truly work together. It is possible that individual teams within a common geographic area might better concentrate on specific age groups, such as those from birth to five years, six to 16 years, 16 and above. Could it be that there are too many one-man generalists around the country, and, as a result, arbitrary decisions are being made without adequate professional cross-fertilization and feed-back? In addition, the question of special training, if any, which specialists should have before working in the area of hearing impairment could benefit from some discussion.

Hypothetical Profile System

In order to place children in programs which meet their needs, the diagnostic group might best consider communicating about assessment of the three areas of function suggested earlier. For purposes of communication with viewing each area as extending on a continuum one can arbitrarily rank each area from least involvement to most involvement. For example, the area previously referred to as "Code for Input" begins with a careful assessment of the auditory system. Assuming further that the child concerned has a hearing problem which is not medically reversible, and is neurosensory in kind, it is possible, through a series of auditory tests utilizing speech, pure tones, and noise stimuli, to state that an Input Code of the inner ear has a mild problem, a moderate problem, a severe problem, or a profound problem. As suggested earlier, each of these impairment levels can be assigned a rank from 1 through 4. Four, therefore, would represent the least contribution auditon is likely to provide that individual for the purpose of receiving the speech of others and monitoring his own production. From the standpoint of traditional classroom structure and organization for nonhearing impaired children, this would place him at a serious disadvantage.

Likewise, a rank of 1, 2, 3, or 4 could be assigned the relative status of the environment. Finally, the integrity of the storage and retrieval, (CNS) as determined by the neurologist, psychologist, and others, could be ranked along the 1 through 4 continuum. In this way, a profile could be determined for each child provided adequate diagnostic services were available. The various specialists could then communicate from a relatively standard frame of reference and begin to fashion appropriate educational programs for the numerous types of hearing impaired children.

According to the concept of the profile system, the child with 2 hearing, 4 environment, and 4 storage and retrieval would need a program quite different from the individual with a 1-1-1 profile, or a 2-2-2 profile. It is interesting to speculate how a program for six- and seven-year-olds with 2 hearing, 4 environment, and 1 storage and retrieval and without early childhood educational experience would differ from that for the child who had early childhood experience. Some discussion of what kind of programs should be sought for the 4 hearing, 1 environment, and 4 storage and retrieval could be useful. What kind of programs should be planned for the 4-4-4 profile? What would be appropriate for the 1-4-1 profile?

Program Alternatives

When the diagnostician looks for program alternatives for hearing impaired children, he often is required to make compromises and arbitrary decisions. A frequent reason for this is the wide variation in the quality of the programs he has available; more often it is due to the absence of existing programs in the child's community.

All too often the diagnostician discovers that a major weakness in local programs is the virtual absence of qualified supervisory personnel. If one is charged with providing public education for the full spectrum of hearing impaired children within a given public school system, he can be certain to have a wide spectrum of needs, as has been suggested in the hypothetical profile system.

Those involved in assessment must realize that diagnostic needs and program needs do not remain static even in a single child. Without adequate program supervision, the odds that optimum programs will be provided as the child proceeds from year to year drop. Evidence of this is found in the too large number of 11- and 12-year-old "educational cripples" throughout the past decade. It is far better to achieve optional educational programs on local, state, and inter-state bases than to proliferate mediocrity indefinitely.

All who are involved in assessment and placement must realize that a diagnostic work-up is not an end in itself. Children change, techniques change, hearing aids change, teachers change. Reassessment at least on an annual basis, and even more frequently in the early years, should be considered a routine function of the educational program. Certainly this should be so in the areas of communication, intellectual function, personal and social development, educational attainments, and language development.

It is necessary to consider the proposition that the reason for diagnostic evaluations varies according to the age and developmental status of an individual. Reasons for evaluating young hearing impaired children differ from the purposes of assessment of those approaching the secondary school years. Young adults leaving secondary schools require assistance different from elementary school children, and it is well known that adequate educational, vocational, and personal guidance does not occur by chance. These important service functions need to be built into the program of education. In planning an educational program, these functions should be considered as important as any other component within the system and should be planned accordingly.

When the diagnostician looks for programs of education, he sees the need for at least the following alternatives:

1. Full-time educational programs for profoundly deaf children.
2. Full-time special classes for hard of hearing children.
3. Part-time special help for selected profoundly deaf children.
4. Part-time special help for hard of hearing children.
5. Full-time educational programs for multiply handicapped deaf children.
6. Part-time and full-time opportunities for hard of hearing multiply handicapped children.
7. Special programs for mentally retarded deaf children.

8. Special programs for emotionally disturbed deaf children.

Current results of the recent maternal rubella epidemic serve to reemphasize the critical need for the above program alternatives, especially including those designed for multiply handicapped children.

When the diagnostician looks for alternatives in educational programs for hearing impaired children, he also looks for systems with adequately prepared teachers. He looks for supervisors and teachers who are willing and able to translate his findings into useful pedagogical maneuvers for the benefit of the child. He looks for those who understand the value of constancy and consistency in the early use of amplification with all hearing impaired children in need of special education.

When the hearing impaired child looks around, he needs to see diagnosticians, teachers, and administrators who communicate with one another about his special problems, who are willing to try new and better ways of doing things even though change may be painful. He needs to find a team who pays more than lip service to individual differences. The hearing impaired child needs diagnosticians, teachers, and administrators who are aware of the fact that business and industry have reorganized their practices as a result of new technology, and he needs to find some of this new technology reflected in his educational program. This team must understand the vagaries of hearing impairment so that unnecessary limits are not set too soon. Perhaps unaware, he seeks a team who realizes that 55 to 60 percent of all high school graduates in the United States today enter college, and that he too will reach college age, although at present only 10 percent of his hearing impaired peers enter college.

Summary

In conclusion, there is an urgent emergency to find ways and means for:

1. Extending the effectiveness of diagnostic efforts which, on a nationwide scale, are something less than comprehensive.

2. Regrouping specialists on local, state, and inter-state bases for more effective coverage of existing unmet needs.

3. Pooling educational facilities in the face of manpower shortages. Although some kind of compromise is likely, priority should be established on local, county, statewide, and interstate bases.

4. Using the concept of the hypothetical profile system to facilitate discussion among various groups responsible for the

organization and administration of programs required to meet the multiple educational needs of hearing impaired children.

5. Incorporating modern technology and other pertinent approaches in special schools and classes for hearing impaired children to alleviate some of the personnel needs.

6. Translating diagnostic findings into active pedagogical procedures directed toward improving instructions.

7. Obtaining additional qualified supervisory and teaching personnel for the large number of children who are detected and diagnosed early, but for whom appropriate programs are lacking.

Problem Seven

ADMISSION CRITERIA FOR DAY SCHOOLS

June Miller *

The purpose here is to report the results of an investigation concerning:

1. criteria for admission to day school programs in various cities in the United States.

2. information pertaining to age of school entrance, linguistic age, I.Q., medical conditions, as well as problems relative to continuation of programs, age range within classes, the problem of multiply handicapped children, physical facilities, and the relationship of all of these to the problem of transportation.

3. criteria for progressing within an educational setting, which includes the transferring in and out of programs.

Data collected were obtained from a national sample of the well-established day school programs, both large and small. A primary concern was to determine the present criteria for admission as well as related information. Inquiries were sent to the following eight cities: Los Angeles, Detroit, New York, East Cleveland, Chicago, Houston, Kansas City, Missouri, and Jefferson County School District No. 1, Colorado. The response was 100 percent.

Each city had broad definitions for deaf and hard of hearing, language disorders or aphasics. The larger the city, the more diversified are the programs. For example, Detroit reported an infant clinic and a diagnostic teaching clinic as a part of the public school system, while in New York City the infant program is carried out by Bellevue Speech and Hearing Clinic or Hunter College. In some programs, they define the degree of loss for the deaf as 60 db ASA or greater in the better ear; the hard of hearing children, 40 db ASA or greater in the better ear; but in other programs, there is no defined decibel cut-off. It was reported that the first classes started for deaf or hard of hearing children required that the child be educationally deaf and educable at the age specified for acceptance. The majority accepted the child at three years of age;

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however, in Kansas City, Missouri, and the Jefferson County School District in Colorado, the entrance age was five years. For the majority of programs, it also was delineated that the child must be toilet trained and of average intelligence.

When questioned about the procedures for referrals, it was almost unanimous from the responses that referrals can be made by otologists, physicians, speech and hearing clinics, school personnel, interested persons, parents or agencies, and these referrals can be made to either the Health Service Branch or the Bureau for the Handicapped. Most of the programs require an examination by an otologist, either on personal referral or by the otologist for the school system. Regarding audiometric evaluation, some programs stipulated that they would not accept the audiogram of a hearing aid dealer but demanded a report from an audiology clinic and an otological evaluation. In others, the school staff tests the children or refers them to specific hearing clinics.

With regard to psychological evaluation, some systems alluded to programs for the mentally retarded or for multiply handicapped. None of the programs described the psychological tests that were administered, the I.Q. level, or by whom these tests would be given. Yet in the regular classes for the deaf, they stated a requirement of normal intelligence.

Although the language level is so important, it was found that no statements were made with regard to either the language levels or ability levels. Having visited many of the smaller programs in the country, it is evident that their population is too small to permit division into learning levels. The smaller schools have a greater range in language levels, I.Q., chronological age, and degree of hearing loss in each class. The same difficulty would apply also to the differences between the small and large residential schools. The larger the system, the easier it is to organize classes for children in relation to chronological age, degree of loss, language level, I.Q., social quotient, and emotional adjustment. Several of the cities did report programs for children with language difficulties, learning disabilities or aphasics, as well as for the multiply handicapped. The definitions did not clearly delineate whether these children had learning disabilities with hearing loss or normal hearing and language disabilities. There was a difference in the age level of entrance for the mentally retarded deaf child, the visually impaired deaf child, and the orthopedically handicapped deaf child. The criteria for these children appeared to be based on the level of the child's maturity and his ability to handle himself within such a program.

Of the eight programs contacted, six were directed by persons who had experience as well as academic work in the field of deaf education. Admittedly, not all competent teachers of the deaf make capable supervisors or directors. However, those persons who are designated by the administration to supervise such programs should have academic knowledge and experience in the field. When this is so, the supervisor or principal can be a part of the diagnostic team and can help place the child in a suitable class. The larger programs and the older programs all seem to have such organization. The supervisor or principal, as a member of the diagnostic team, is responsible for providing information as it relates to the child's educational level, language level, and social adjustment. The principal is also responsible for communicating information to the school which accepts the child after dismissal from a special program.

In many special education programs, the director has had almost no experience as it relates to special education and none as it relates to the deaf. These administrators are well educated in their own field and they are sincere in their desire to do something for the hearing handicapped child; however, they do not understand the overall program and, thus, the teacher of the class for the hearing impaired is at a loss for help and guidance. A supervisor ten miles away or in the state capital can be of little help under such conditions. The great need is for supervisors or head teachers who keep up with all the literature related to the field as well as with new equipment. In many ways there is deprivation by having the "little red schoolhouse" for the hearing handicapped child with the broad age range in the classes, the different language levels, as well as the different degrees of hearing loss. People are still concerned more with grouping as it relates to chronological age than in grouping based upon language age or mental capability. Classification is not being made as it relates to the degree of hearing loss. The number of children in a class, however, is not large since state legislators have demanded that this be kept small.

In some of the reporting programs there was a very close relationship between the screening program, audiometric testing, the diagnostic evaluation clinic, educational evaluation, referral into a variety of kinds of programs, and assistance at the high school level. These systems recognize that children need programs which are flexible.

Admission vs. Dismissal; Reevaluation

In the courts of this country one is innocent until proved guilty; even when proven guilty, one may appeal. In the majority of the public schools in this country, there is a procedure for general pupil population movement within the system and a procedure for transfer. In the programs for the hearing handicapped (either day or residential), however, there appears to be a very different system in operation. For the hearing impaired, transfer in and out of programs, return to programs to be cued in and upgraded, assignments to a regular classroom, returning to the special class only for additional help in a homeroom program, these are not as easy to carry out as it looks on paper. In too many instances, there is not even a written procedure for such movement.

There is a great deal of discussion about integrating hearing impaired children into the regular classroom. Many of the teachers in the special classes, as well as the parents, are ready to try to carry this out, but then a new hurdle appears. The teacher of the larger classroom feels that he already has too many children and should not be expected to accept another child who will be difficult to handle with his hearing problem.

From experience, including personal experience, it is known that many children do well academically in an integrated classroom, but fail in their social and emotional adjustment. Teenagers with hearing, as a whole, have difficulty adjusting to a variety of situations. The hearing handicapped youth seems to think he has even greater problems. At the other end of the continuum, the teacher in the regular classroom may allow the hearing impaired child to "get by." He may not make this child work up to his own capabilities. When the time comes for him to return to the special class for some extra work, he may not be referred because the teacher may feel such referral is evidence that he has failed. There are no pat answers, but there does need to be flexibility for change, growth, and adjustment.

Many new urban areas are developing outside the limits of the established school districts or of the consolidated special education programs. Sometimes these are in different counties or even across state lines. Many families elect to live in a larger school district so that their child may attend a special school. When he is dismissed from this program, they move out of the district. It is then often most difficult to move a child back into a special program for short periods of time for up-grading or teaching new language.

With regard to the transportation of children, many school systems provide transportation for a majority of the children enrolled, using either school busses or a provision of funds for transporting the children to and from school.

Looking at the subject programs on paper, there is diversification with regard to the degree of hearing loss in the better ear, the extent of programs available, and the types of diagnostic clinics, but still a similar trend seems to appear across the board. These, however, are all larger cities which have had programs for hearing impaired children for approximately 50 years. The Kansas City system is now in its 53rd year. The Los Angeles program was started in 1914; Chicago, 1896; Detroit, 1898; New York, 1908; and Houston, 1915. Jefferson County was in an age minority, having begun in 1952. Yet, in looking through the directory of schools and classes throughout the United States, it appears that the majority of the day school classes and programs were begun after World War II, expanding in 1960, 1961, and 1962.

Further expansion now is on-going under the impetus of Title I of the Elementary and Secondary Education Act, and soon the effects of Title VI will become evident. Viewing this expansion, one becomes apprehensive because it is evident that hearing impaired children are not getting the broad diagnostic evaluation they need. Few people across the country really understand the problem of the hearing impaired. Few people actually understand the overall problem as it relates to many of the programs in local school districts. Only a limited few specialists in the education of the deaf and other hearing impaired have the ability to develop new and realistic criteria, to take needed cognizance of age range, to understand the importance of language level and the need for development of better language or linguistic scales. It is from these relatively few persons that new determinations will come and by whom improvement will be made. The establishment of broader lines of communication will help to insure that goals of better education are attained.

In summary, the programs for hearing impaired children in day schools should include some type of infant program, the provision of hearing aids, parent education, parent guidance, diagnostic clinics, hearing screening, itinerant teachers for those children with mild losses, classes for the deaf, classes for the hard of hearing, integration into regular classes where possible but always endeavoring to attain total adjustment as well as academic adjustment. There should be flexibility within the programs for giving guidance to the teacher in the regular classroom and to itinerant teachers in art, industrial arts, physical education, and others.

There needs to be an expansion and improvement in the programs for adolescents. These should include ungraded classrooms, high school programs, vocational programs, and itinerant teachers of the deaf in the junior colleges. Before long there should be plans for adult education programs for the many deaf adults within the communities. There are schools that are on their way in these directions, but the path must be made clear, and teachers as well as children require leadership.

Problem Eight

COORDINATION OF SPECIALISTS IN THE PUBLIC SCHOOL PROGRAM

Mamie J. Jones *

Concerns expressed in recent literature have been focused upon who is teaching the child with impaired hearing and upon what he is learning in order to realize his capabilities and to cope with a fast changing world. Very little emphasis has been placed on the topic of coordination of specialists working with hearing impaired children within the public schools.

Perhaps this situation exists because the public schools have been negligent in assuming their responsibility for the hearing impaired child. Only a few years ago, Dr. Romaine Mackie said that the hard of hearing child was the most neglected child in the public schools. Recently, Dr. Leo Connor stated that, for the past few years, day classes for the hearing impaired have been mushrooming, resulting in many instances in "haphazard" educational programs throughout the country. His concern was related to the way in which the educational program was developing and not to the fast growth of classes for the hearing impaired. The mushrooming of programs has not occurred in all states and there are instances where the few programs which exist are incomplete as far as total school planning and ancillary services are concerned.

Assuming there is a program for the hearing impaired in the public school system, how is it possible for all of the specialists involved to coordinate their efforts in the best interest of the hearing impaired child? Coordination of any program is largely dependent upon leadership. In this instance, leadership is needed at both the state and the local level. Because of the authority vested in state departments of education to provide an educational program for all children, leadership should be initiated at the state level. Unfortunately, this does not always happen. The establishment of policies and the setting of standards for the development of public school programs, as well as the determination of teacher qualification requirements, are essential if the needs of the hearing impaired child are to be kept in focus.

Each state department should employ a qualified consultant in the field of the hearing impaired to give leadership and guidance in the development of a

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program to meet the needs of these children. For those states which have not provided funds for the employment of such a person, it is hoped that Title VI funds will be made available for this purpose, although the scarcity of qualified personnel may prohibit states from employing a consultant immediately. Also, many people do not want state employment because of the low salaries offered in many areas of the United States. There are other ways of meeting such problems. One way in which state departments could offer this leadership is through the purchase of consultative services. In other words, the department could buy the services of one or more qualified professionals in the field to give guidance in the development of a state plan, i.e., policies and standards. Consultant services could also be purchased to aid a local school system in the initiation of a program, the development of a plan which would include a blueprint of the status quo and growth. This plan should include ways in which the teacher of the hearing impaired could coordinate his services with those of other specialists in the public schools.

Leadership in the public school system is largely dependent upon the director of the program for exceptional children who, hopefully, has some knowledge in the field of the hearing impaired. In large school systems, a fully qualified coordinator in the area of impaired hearing is essential in addition to a director, if appropriate leadership is to be given.

One of the first steps which should be taken by the director or the coordinator is that of public education, not only within the schools but within the community or region. It now is well known that the success of a program--no matter how well organized, structured, and qualified--depends upon its acceptance not only by the school personnel but by the people in the community or region. There has been a national apathy concerning the education of the hearing impaired and, although things have changed and seem to be gradually improving, this apathy still exists in many sections of the United States. For this reason and before the problems of coordination are met, a salesmanship job is not only necessary but is essential. The apathy of the people in relation to the hearing impaired must be challenged.

An ideal and complete program for the hearing impaired in the public schools should extend from nursery school through high school. Frequently, classes or programs start and end in the elementary school. Dr. Connor urges educators of the deaf to assure a full secondary education for all deaf pupils. The needs for the services of agencies and specialists will vary, depending upon the age and educational requirements of the child, but a core group of specialists will remain necessary as long as the child is in school. This means, then, that a total educational program for a child with impaired hearing will not be possible or feasible except in relatively large metropolitan areas, or in regions within a state, or in regions crossing state boundaries. The number of highly qualified specialists required for a successful program makes the initiation and development of such a program impractical and impossible in less populous areas. Admittedly, it will take creative leadership to get cooperation between school systems in the development of a program.

Local or regional units should be large enough to have a staffing pattern that will embrace the numerous disciplines necessary for servicing the hearing impaired. Otherwise, the child will suffer from an educational program which is limited in scope. The staffing also has to be generous enough in number so that personnel will have time to engage in activities such as in-service workshops, committee meetings, consultation, and evaluation, all of which are essential for effective coordination.

Leadership at the local level, usually assumed by the director of the program for exceptional children or by a specially qualified coordinator in the area of impaired hearing, has to have not only the vision but the authority for clarifying and making appropriate evaluation and programming possible. The leader has to look at existing conditions and remove road blocks in order to permit the development of a program. This process entails study, review and analysis of all the factors in order to locate and identify the problems, needs, and successes, and to take the necessary steps to correct, improve, strengthen, or increase the services to the hearing impaired.

Prior to the development of a program for the hearing impaired in a local school system, a coordinated effort should be made by all who will be involved to make a blueprint of the educational program desired. This would not necessarily require the bringing together of all the group at one time, but the coordinator of the program would have the responsibility to see that intercommunication channels were developed and maintained between all of the members of the team. The coordinator should bring together certain members of the team at appropriate times in accordance with the needs of individual students as well as in accordance with the needs of the group. This team includes a number of professional people, because the development of an educational program for the hearing impaired is a complex one. Each person involved must be as conscious of his place, his role, and his responsibilities as a ballet dancer would be in a command performance of "Swan Lake."

Overall objectives and goals of the program must be defined in relation to the policies of the State Department of Education and in relation to policies of the total school or school systems involved, as well as having goal definition on the basis of the type of hearing impaired pupil enrolled and the educational objectives of the program. Practical consideration must be given to locations and facilities providing programs from pre-school through high school levels, both within the school system or region and within individual schools.

The knowledge and understanding of the principals and the milieu of their schools should be major determining factors in the selection of the locations. Principals are key people in determining the acceptance of a program and should have such strengths that they will be not only supportive but will be enthusiastic about the services offered. These building administrators can make or break a program.

Evaluation and screening procedures must be planned, including the services of the otologist, the audiologist, the psychologist, the educators (usually the coordinator of the program and the teacher), and--when needed--the psychiatrist, neurologist, ophthalmologist, and the pediatrician. It has been suggested that each hearing impaired child should have his vision and hearing tested every other year and that appropriate psychological testing should be done every three years. Certainly, services should be available also on an individual need basis.

In the limited time available, it is not possible to name or to go into the roles of all the team members. It is important to stress the need for early identification of these specialists and for bringing them into the planning at an early stage, so they can know and assume their roles on the coordinating team. The key person on the team in relation to what happens to the child is the teacher. Genevieve Drennen Roberts said some years ago that it would appear that many schools expect the teacher of hard of hearing or deaf children to have the skills and knowledge of a guidance director, a parent counselor, a social worker, a nurse, a speech therapist, a curriculum expert, and to be versed in achievement testing, auditory training, technological equipment and speech development. Roberts further stated that this person must know anatomy and physiology of the ear, and must be able to develop the physical, social, emotional and educational growth for hearing impaired children of all ages.

It is hoped that the day of the teacher of the hearing impaired being all things to both the student and the program has passed. Instead, it is anticipated that, as a part of the teacher's preparation in gaining knowledge and developing certain specialized competencies in teaching the hearing impaired, he has also learned the skill of participating as a member of an inter-disciplinary team. This teacher will need to know how to utilize the valuable information available from other specialists (many of whom Roberts identified above), as well as other important specialists, such as the reading consultant, art and music supervisors, the librarian, regular classroom teachers, the curriculum director, the physical education teacher, the vocational education consultant, the audio-visual supervisor, the consultant for the gifted, the consultant for the multi-handicapped, and the vocational rehabilitation counselor.

It should be remembered that parents are the first teachers of all children. The better use that a school system can make of parent knowledge, energies, and understanding of his own child, the better the results should be in the establishment of earlier learning skills, goal-directed energies, and improved communication abilities. Cooperation of parents with school personnel throughout all the grades will result in a reinforcement of the goals of the teachers and of the other team specialists.

In conclusion, questions for discussion and research investigation might cover such topics as:

1. What is the optimum age at which the school or teacher should work with the parents of the hearing impaired child?
2. Where should the early education of the parents be -- entirely in the home, entirely in the school, or a combination of both?
3. Which specialist or what combination of specialists should have the responsibility of administering the program for infant children with impaired hearing?
4. What qualifications should the audiologist have to work in educational programs for the hearing impaired, i.e., what type of educational preparation and preservice experience should the audiologist have?
5. What kinds of curriculum should be developed for secondary school hearing impaired children? Research is needed on academic versus pre-vocational or vocational education, on an experiential curriculum as opposed to a subject-matter curriculum.
6. What is the role of the special class teacher versus that of the itinerant and/or resource teacher?
7. Who should be responsible for the educational referral and placement of the hearing impaired children eligible for school?
8. How can effective communication be activated among specialists?
9. Can there be a comparison of results achieved by children who have studied with teachers of the deaf who are generalists and those who have studied with teachers who are specialists in a field of secondary education?
10. What are the determining factors in selecting students for one type of educational program as opposed to another, i.e., academic versus pre-vocational or vocational?
11. What are the procedures for developing regional programs, either within a state or across state boundaries?
12. How can a truly child-centered program develop?
13. How can residential day school programs and day classes coordinate their efforts in order to meet better the needs of the hearing impaired child?

14. If it is assumed that leadership is a prime personal qualification for a coordinator, what experience does this person need?

15. How can public supported educational programs of the residential school, day school and day classes better coordinate their efforts to serve all hearing impaired children?

16. What type of coordination of school personnel with other specialists is needed to meet the needs of the hearing impaired child?

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PART IV

RECOMMENDATIONS FOR RESEARCH ON DAY PROGRAMS FOR THE HEARING IMPAIRED

I. Introduction

Throughout the Conference there was a strong orientation to research with a view to establishing quality day programs for hearing impaired infants and children. In presenting the researchable topics, some topics such as multiply handicapped, identification techniques, preparation of professionals, etc., have, for organizational simplicity, been identified with one specific age level although in several instances they should be considered as pertaining to all educational levels.

First, it was felt that certain descriptive data were needed in order that educational planning could be based on a factual knowledge of the magnitude and nature of educational needs and the extent to which present programs meet them. Surveys were recommended to gather some of these data.

Second, there were a number of problems that were clearly conceptualized as lending themselves to actual experimental study or investigation. In some of these proposals specific experimental designs were referred to in order to encourage and facilitate the efforts of researchers.

Third, there were broad general areas to which the efforts of researchers are directed. A number of these topics might not be considered "researchable" by experimental scientists, but they represent what the conferees felt were significant questions for which answers are needed if hearing impaired children are to be served effectively in day programs and elsewhere.

Finally, several general studies and demonstration projects were suggested. These, for the most part, represent proposals for empirical trial and error efforts at testing techniques or disseminating current knowledge.

Since this was the first such national conference on the subject of day programs for hearing impaired children, a number of suggestions evolved which might be thought to have somewhat remote connections to the specific area "organization and administration of day programs." The breadth of this initial inquiry into the problem, however, stimulated ideas which the editors have chosen to include rather than delete from the record. Thus while the focus was maintained, ideas for research in closely related areas did arise and have been retained.

II. Surveys

There seems to have been no serious national effort to determine the nature and extent of existing day programs for the hearing impaired nor state and local plans for future growth of such programs. Educational and vocational planning for the hearing impaired is contingent upon knowing how many children need to be served, where they reside, and the nature and extent of their problems. The participants in the Conference expressed the need for the study of existing day programs in order to obtain information on which to base state and local planning and to develop innovative organizational and instructional approaches. It was recommended that various aspects of the programs be studied.

A. Identification Procedures

1. The facilities, personnel, and procedures used to identify hearing impaired children within the geographical scope of the operations of a day program need to be defined. We need to know whether day programs have active methods of identifying hearing impaired children prior to school entrance either through their own resources or through cooperation with other facilities. This question is of paramount importance because of the critical need for beginning language and communication development with hearing impaired children at the earliest possible age. Related to this question is the problem of the professional qualifications of personnel involved in the identification and diagnosis and the functions of each person in making recommendations for the education of the hearing impaired infant and preschooler.

2. In connection with the early identification of hearing impaired children, the possible value of high risk registers should be explored. This is a problem related generally to the identification of hearing impaired children rather than only to day programs. However, the Conference participants considered it important enough to discuss at length. The conferees expressed the opinion that a high risk register on a nationwide basis does not appear to be feasible at present. Instead, it was recommended that pilot programs be undertaken to develop high risk registers in a number of selected communities to serve as possible models for the rest of the nation. Further, it was recommended that such registers be developed with a view to relating them to early evaluation and management practices. Thus an effort would be made to identify in early infancy the prevalence of hearing impaired children and to establish pertinent data relative to these children such as their geographic distribution, the effects of epidemical diseases on prevalence, and the nature and distribution of multiple handicaps.

3. The identification technique in EEG-Average Evoked Responses that focuses on the K-complexes, visible during the first three months of

life, should be researched more thoroughly for standardization; reference especially was made regarding the testing time after feeding, and precision in the determination of the intensity of the stimulus. The technique has been developed to detect children with severe losses, but there are a certain number of false positives which need careful interpretation. A second phase, after standardization, would be to compare the efficacy of the technique with the ability of general practitioners and pediatricians, using conventional techniques of startle or auro palpebral responses (blinking) in the detection of a given sample of infants.

4. Research on the techniques of differential diagnosis of infant and preschool deaf children is a critical need if proper programs for their education and therapy are to be developed. There should be included also a study of the means of developing diagnostic teaching abilities in teachers of hearing impaired infants through the use of:

   a. postgraduate study;
   b. extension of the teacher-preparation program;
   c. revision of teacher-preparation curricula; and
   d. short courses and workshops.

B. Early Child and Parent Guidance

1. Since the purpose of early identification of the hearing impaired child should be to lead to early training, a study should be undertaken to determine to what extent this now takes place in day programs and types of early training that are provided. The conferees recommended that the study include parent counseling practices and their evaluation as well as the rights and role of the parents in educational processes.

C. Preschool Management

1. As part of the general study of day programs, the Conference participants recommended that particular attention be paid to the management of the hearing impaired child prior to the age of formal entrance into school. Since this age varies considerably throughout the country, and since the very early years of life are critical in language and communication development, infant and early childhood training of the hearing impaired child is a matter of vital concern. Programs for very young hearing impaired children presently are developing in a variety of settings such as university and hospital clinics, residential and day programs, and under various health and welfare agencies. The conferees recommended that the various types of programs be studied and particular attention paid to the relationship to the formal elementary school program.

2. The conferees recommended that future day program study include a survey of the professional preparation and qualifications of persons conducting preschool work with hearing impaired children and the possible establishment of a specialty within the area of the education of the hearing impaired.

3. The conferees agreed that there should be a study of the educational, psycho-social, audiological, and linguistic functioning of children with marginal hearing losses, communication difficulties, and those with variable hearing losses due to middle ear conditions. Studies and observations indicate that these children often suffer severe educational retardation. Although the conditions are known to be common, the educational problems and consequences to the child, and the subsequent problems in educational management to the schools, are not known.

4. The question of optimal kinds and sizes for day programs, as well as curricula, should be researched as to the extent to which they vary as a function of whether the child is "deaf" or "hard of hearing." The implication of the hypothesis to be examined is whether a program appropriate for one type of hearing impaired child is or is not suitable for children with different degrees and types of hearing loss.

5. Since the major new emphasis in the education of hearing impaired children is toward increasingly earlier education, the conferees agreed that there should be a study of the value of early education of hearing impaired children.

6. A survey of existing American and European parent education programs with particular emphasis on the infant and preschool levels should be undertaken to determine the success of various techniques.

D. Elementary and High School Management

1. The conferees recommended that the study of day programs include, in addition to the preschool programs, the elementary and high school years. Information should be obtained on such important factors as:

   a. intake criteria;
   b. the continuing evaluation of children audiologically, psychologically, and educationally;
   c. criteria for integrating hearing impaired children into regular classes;
   d. number of children, classes, teachers, supervisors, and ancillary personnel in the programs;
   e. special high school programs provided, both academic and vocational;

f. work study plans;
g. college and career preparation and counseling;
h. coordination of high school programs with state and local vocational rehabilitation agencies; and
i. adult education and higher education.

This body of information should provide guidance for communities interested in determining what is needed to establish a quality program for hearing impaired children.

2. Existing services and types of programs to identify and educate multiply handicapped hearing impaired children should be surveyed. Included in this survey should be data on the number and types of multiply handicapped children who now receive no education or inadequate education in the light of their hearing impairment and other handicaps. Multiply handicapped children are increasingly prevalent among the hearing impaired school-age population, and there is evidence that this trend will continue. Present facilities and techniques are grossly inadequate, future needs are unknown, and the extent of present facilities obscure.

3. A study or series of studies is needed of the incidence, diagnostic needs, and teaching of multiply handicapped hearing impaired children including those resulting from rubella, prematurity, and Rh incompatibility. Among the specific subjects of concern in such a study should be:

   a. growth and development studies of multiply handicapped and high risk children;
   b. curricula and ancillary needs;
   c. new techniques and instruments for the measurement and evaluation of programs designed for multiply handicapped hearing impaired children;
   d. learning disabilities of probable central nervous system origin associated with certain etiologies of deafness; and
   e. the curricula of college programs for the preparation of teachers of multiply handicapped hearing impaired children.

E. State and Local Organization of Programs

1. Day programs for the hearing impaired in the United States vary considerably in quality and effectiveness. Most of these function within local school systems with varying degrees of professional and financial support and regulation at the state level. State financial support for local programs and regulatory functions over such programs should be studied. The conferees recommended that special attention should be

given to the working relationships with other specialists and ancillary personnel in the public school program as well as other agencies concerned with the hearing impaired at the local and state levels. Within this area of proposed research several issues were selected for special emphasis by the conferees:

a. Provision of a comprehensive program of services for hearing impaired children requires determination of a minimal number of children or classes of children. Information does not exist with which to determine what this minimal number should be. The conferees recommended that a study of this subject be included in the general study of day programs. Also included should be information on the degree of homogeneity desired in classes in terms of degree of hearing loss, age at onset of hearing loss, IQ, concomitant disabilities, and other factors.

b. Many local programs, to provide adequate services for hearing impaired children, might well need to include residential care for some children. There is a lack of consensus whether this care should be provided on a foster home basis or in a regular residential program. It was recommended that a study be made of the relative advantages and disadvantages of the two types of child care.

c. In many instances the operating unit for an adequate educational program for hearing impaired children might need to transcend the political boundaries of counties and states. Some such units already exist. The conferees recommended that a study be made of these programs to determine their effectiveness and the feasibility of their application to other areas of the country. 1/

2. A factor analysis of critical variables of successful and unsuccessful cases of integrated deaf children to develop criteria for integrating deaf children -- variables should include:

   a. supportive services available in the school;
   b. communication abilities;
   c. hearing ability;
   d. social abilities;
   e. academic achievement;
   f. intelligence;
   g. conditions of the regular classroom and school;
   h. conditions of family and community; and
   i. means and timing of integration.

1/ See page 69 for suggested research design.

The rationale for this is that objective data are needed upon which to base decisions on which hearing impaired children should be integrated.

3. A comparative study should be conducted of the various factors affecting successful psychological and sociological adjustment of hearing impaired children in different settings; i.e., their own homes, foster homes, and residential schools. In particular, the kinds and degree of supportive help from various disciplines in each setting should be studied with a view to establishing the conditions under which the most desirable over-all program might be chosen for a given hearing impaired child.

With the possible exception of the establishment of model high risk registers, most of these research recommendations relate to the gathering of information on the nature and extent of day programs for the hearing impaired throughout the country. The research specialists recommended that some national organization undertake this investigation in cooperation with a university or other research-oriented organization and under the guidance of a national advisory board. The study should be conducted to provide information for the guidance of the expansion of day programs which is sure to ensue from the enactment of the Elementary and Secondary Education Act of 1965. In a country as diverse as the United States, a single pattern cannot be established for day programs. A number of apparently successful programs in operation at present differ widely in many ways. National information on day programs would provide an understanding of the types of programs which work best in particular types of situations and what the programs require in order to provide quality education for all hearing impaired children.

III. Demonstration and/or Pilot Projects

Certain demonstration and/or pilot projects were detailed by the conferees in the discussion groups and included by the recorders in their notes. These have been included because they were judged by the researchers to be specific and sufficiently defined to consider implementation at an early date. In some instances they include some of the topics under Section II. Surveys.

The projects listed below have been organized as follows:

A. Audiological and medical

B. Instructional

C. Organizational

D. Educational diagnosis

A. Audiological and Medical

1. Pilot projects should be established to determine the most effective and most feasible infant screening techniques. These projects should be designed in conjunction with Public Health and other specialists and include the following techniques:

   a. High risk categories should be established based on conditions which are known to cause hearing impairment.

   b. Comprehensive data on the delivery and the medical condition of the child should be routinely recorded before the infant leaves the hospital.

   c. Areas covered by the Comprehensive Care Program of the War on Poverty are suggested areas for initial high risk registers and screening procedures.

   d. Screening for auditory impairment should be undertaken routinely by the fifth day, at four months and twelve months.

   e. Developmental questionnaires for parents might be one technique used to provide additional data.

   f. Intensive follow-up of each child in the pilot project should be considered a primary requirement of the screening procedure.

2. Research and demonstration are needed to focus on the routine testing for hearing impairment practised by the general practitioner and pediatrician and compared to the more sophisticated techniques used by qualified audiologists, to determine what percent of hearing impaired children, if any, are being missed by these commonly used techniques.

B. Instructional

1. Research and demonstration projects for preschool and infant deaf children must be established using a variety of techniques, including training of parents, development of new teaching materials and instructional techniques, use of teacher aides, in order that improved techniques and materials may be developed and evaluated.

2. Research and demonstration projects developing and testing different teaching approaches to the education of the multiply handicapped hearing impaired child are needed.

3. A regional-level professional research team should be organized to direct research on learning and to develop effective ways of disseminating results of that research.

4. A demonstration project is recommended for parent education in isolated areas with diverse approaches to instruction and transportation; e.g., programmed instruction, home visitations, T.V., helicopter, et cetera.

C. Organizational

1. There should be an action research project in which a single state might be used as a model and funded to demonstrate effective statewide coordination.

2. A study and pilot project is needed to determine, describe, and evaluate the success of educational programs developed across traditional fiscal boundaries, such as state lines, but based on population density.

D. Educational Diagnosis

1. There is a need for research and demonstration projects aimed at correlating otologic and audiologic data with observed educational problems encountered by acoustically impaired children for the purpose of identifying acceptable generalizations leading to the early planning of the child's education when identified in the early years as a result of a medical or audiological examination. Such observed educational problems might include:

    a. observation of developmental patterns;
    b. motor coordination (gross and fine muscular coordination) upon which reading, writing and speaking depend;
    c. language patterns, prosody, grammar, expressive and communicative skills;
    d. hierarchy of concepts, upon which traditional formal educational programs depend;
    e. socialization patterns, dependency patterns, mobility, direction patterns of establishing contact with others as family members, community members, school members, authority figures, teachers, et cetera; and
    f. a classification or description of the variety of teaching approaches that work with variously classified (educationally) hearing impaired children.

2. Development of techniques of assessing the speech, speechreading, and language of hearing impaired children. These are the areas of major

emphasis in the education of the deaf, but techniques for measuring achievement are lacking.

3. Research that leads to test development of psycho-diagnostic instruments for differential diagnosis is needed.

4. Validation of early diagnosis of learning problems of deaf children through longitudinal study is recommended to determine if and how teaching was modified as a result of such early diagnosis and the results of such teaching practices.

SUMMARY OF GROUP DISCUSSIONS

During the 1967 National Research Conference on Day Programs for Hearing Impaired Children, the central theme was the organization and administration of programs. It became evident in the position papers that, while each of the problem areas discussed was one aspect of administration, other functions of management and control also could have been encompassed under the broad theme.

The working groups, which included all of the conference participants and represented a cross section of professional disciplines and educational programs for hearing impaired children, studied each of eight problem areas. These included:

1. Organizing and administering an adequate day program at state and local levels;
2. Demographic and economic base criteria;
3. Supervision at state and local levels;
4. Classroom teachers' need for supervision;
5. Screening for early identification of hearing impaired children;
6. Diagnostic evaluation and recommendation for placement;
7. Admission criteria;
8. Coordination with other specialists in the public school program.

The following is a synopsis of the collective group deliberations together with the recommendations that evolved. None of these latter, however, were submitted to a formal vote.

State Organization

While it was recognized that planned program improvements in education for hearing impaired children are on-going throughout the various states, cognizance was taken of the lack of perceptive awareness of the instructional needs of hearing impaired children by persons in administrative positions. At the time of this meeting, there were only nine persons on the staffs of state departments of education whose sole responsibility was the supervision of instructional programs for the hearing impaired, with two of these nine in a single state.

The dearth of instructional leadership at the state level must be correlated with the steady increase in enrollment figures for pupils from five to eighteen or twenty-one years of age with hearing losses and with the marked increase in the nursery-aged population. This growth during the past decade is apparent in the large number of day classes, although there has been only a slight increase in the number of day schools for the deaf. Further, there has been an increase in the number of nursery programs established in a variety of settings, often under the supervision of neither qualified teachers of deaf and hard of hearing children, nor under the supervision of state departments of education. Frequently, such classes and programs are initiated for young hearing impaired children with little consideration of long-range educational planning or of the development of appropriate physical facilities.

Further, demographic information concerning numbers of hearing impaired children within a given state is either lacking, inaccurate, or available only within a given agency. Thus, state-wide projection of needs for school facilities, funding, personnel, and equipment is precluded.

In short, there are steadily more children and more teachers in classes, but no proportionate increase in supervisory services or in coordinating services found.

In addition to the problem of instructional leadership and of demographic data, there are essentially no provisions by state departments of education for: a) coordination of local educational services for hearing impaired children with those provided by other state agencies, including state and private residential schools; b) in-service education programs; c) research; d) curriculum development and evaluation; e) follow-up of students to determine program effectiveness; or f) exploration of educational services, such as itinerant teachers and commuting students.

The majority of state departments of education have not created positions with clearly defined responsibility and authority to provide flexible, dynamic, and comprehensive services to all hearing impaired children. Available statistical data concerning the growth of day programs indicate that such positions and functions are essential if the states are to meet the primary responsibility for the education of all children. There are numerous agencies providing services of ranging quality, coordination; there is the ever present danger and reality of duplicated efforts, service gaps and resultant lack of quality education for deaf and hard of hearing pupils. Since state legislatures enact enabling statutes, responsibility for their vitality rests with state boards of education, and, in turn, boards rely upon departments of education for recommendations for implementation.

Local Organization

Despite the emphasis given to the hierarchies of administration together with the authorities and responsibilities of both Federal and state governments, there was a strong reaffirmation by the conferees of the ultimate responsibility of the local school system for the education of hearing impaired children. The educational responsibility of the day school unit, whether a day school or a number of classes grouped administratively or physically, includes: infant training, nursery programs, elementary school, itinerant teachers for pupils integrated in the schools for the normally hearing, provisions for secondary, vocational, and adult education, and availability of broad diagnostic services — educational, medical, audiological, and psychological — as a necessary adjunct. In addition to all these services there must be at each level also both recognition of and services for the child with multiple handicaps. Because of the extent and nature of the services required, a local program for the hearing impaired need not necessarily, however, be confined to the same geographical boundaries as the regular school program, thereby giving "local" the flexibility to include "centers of learning" which may cross county, city, or even state lines. Certainly, demographic and budgetary considerations, as well as the scope of services essential for a quality educational program, warrant such regional organizational structure.

Since local hearing programs represent a wide variety of sizes, conditions, administrative practices and educational philosophy, as well as wide differences in supervisory provisions, the problem related to program quality has many facets at the community level. The extent of the problem is magnified for the isolated teacher in single day classes within the organization of a school for the normally hearing, for she then lacks even the opportunity for interaction and program planning with another teacher. Appropriate grouping of pupils for instruction is usually lacking in such isolated day classes, as are essential supportive services. In spite of the responsibility of the local community to ensure educational opportunity for all of the pupils within its jurisdiction, few communities establish minimum essentials for educational programs, services and facilities. It is unusual for standards to be imposed by states to insure minimal program provisions or consistent provisions for assistance to the local systems charged with responsibility for education.

Supervision

Program organization and administration are inevitably interrelated with supervision. More simply, supervision, to be effective, must be an extension of administration, since here the plans, policies and regulations are implemented in an effective program. Aspects of the broad problem specified as "supervision" take cognizance of the cumulative data supporting all areas of program initiation and management.

Supervision includes specific levels of operation: (1) the state coordinator supervises total state programs, initiates and stimulates establishment of new programs, regionally and locally, implements the comprehensive state plan, by data collection, by developing experimental programs and innovative procedures, and by ensuring maintenance of quality education through professional leadership; (2) the local or regional supervisors may have responsibility for a single program consisting of a limited number of classes within one or more schools or school districts; (3) the supervisor within a given school or group of classes often serves in a dual capacity as supervisor and classroom teacher.

Concern with coordination of services at the state level was primary for the conferees in considering the problems of day programs. Just as the local school district or the regional center, an extension of the local schools, is the focal point of education, the state is the logical focal point of authority. In spite of the mounting number of children in day classes, it will be recalled that there are only nine state education department positions whose incumbents have a sole responsibility for instructional programs for the hearing impaired. Authority, at best, becomes diluted without defined responsibility. And similarly, responsibility without stated authority to function within a municipality or district is detrimental to the development of quality educational services for hearing impaired children. Even when a position is established for program supervision and coordination, there is no assurance that the staff member occupying the position is professionally qualified to give leadership to the program for the hearing impaired, nor that other assigned duties will not dominate his time and efforts.

There is no clear definition of needed supervisor qualifications at either state or local level; there is not even a set of accepted recommended guidelines for such positions. Closely related to the unspecified characteristics of supervisory leadership, there is little enunciated direct relationship or communication between state and local supervisors or consultants. State residential school supervisors tend to have little contact with state coordinators or with supervisors of day programs. This situation encourages isolation one from another, except in those instances when two individuals elect to coordinate their efforts. If cooperation is not voluntary, it is quite possible at the program level for paths to cross seldom, if at all. Even in states where reimbursement for programs is dependent upon state funding per qualified teacher, the state frequently fails to ensure the appointment of qualified teachers or of requiring in-service training to improve competencies. It is not infrequent for either state or local program leaders, or both, to seek out consultant help from other public or private sources, which may or may not be located even in the same state.

Although an effective program for hearing impaired children is dependent upon medical and audiological diagnosis and periodic re-evaluation, the education supervisor may function in the schools with little or no direct contact with these professional disciplines. As a result, some children do not receive needed total services, while others may have duplicated attention. Such practices can have the dual effect of limited value programs and limited community support for programs. These hazards suggest a need not only for delineation or supervisor qualifications, but also of supervisor role duties.

Concomitantly, the classroom teacher too often has little contact with either state or local supervisors and continues to work essentially in isolation from valuable consultant help. Even worse is the situation when there are supervisors, but lack of role identification or needed competencies constitute a frustrating wall of resources at hand but not available.

Thus far too little supervision is available to programs for the hearing impaired, and that available often lacks needed authority or role identification. With the number of classes increasing and more children being enrolled, isolation in the school system continues unabated, resulting in less than an adequate educational program.

Identification

Identification continues to be a multi-faceted problem, since it involves not only how it is to be achieved, but also by whom and with which methods or procedures. Currently, screening programs are in effect in many public health well-baby clinics, maternal and child health clinics, in public and private diagnostic clinics, in pre-school surveys, and in periodic screenings conducted at different grade levels in the public schools, to name several established procedures. Most commonly, information obtained in these several ways remains with the agency or service in which it was obtained and is not readily available to other agencies. Further complicating the system now in use is the fact that individual children may be screened by several agencies, while others are known to none of the screening programs. There has been little effort directed toward establishing centralization of information regarding children with hearing loss. With data not readily available, neither state nor local communities can make effective long-range plans for education.

Another aspect of identification is the form in which the data are presented. Information generally is couched in otological and audiological terms and omits expression of the educational implications of the physical disability defined. Even essential audiological information is not transmitted to the classroom teacher, thus limiting immediate, individualized programming. As a result, neither educators nor parents are being provided information needed for education or training.

A third limitation in the identification area is the isolation in which screenings are conducted. Whether the screening tests are made by uncoordinated agencies or as a state-wide survey, there is no effective comprehensive system of follow-up for the hearing impaired children identified. This deficit in the identification process is equally critical for youngsters with irreversible hearing loss and for those who have problems which can be corrected or alleviated. The time lost for essential planning and programming can constitute an irrevocable handicap for the deaf child, and it can be the difference between deafness and hearing for the child with a correctable condition or one amenable to partial correction by treatment.

There is no comprehensive identification program for hearing impairment in the United States. While it is vital to initiate educational and parental counseling when the child is at the infant stage, there is little evidence of early compulsory screening for all children. To the extent that limited services are available, they are uncoordinated and the benefits from them are diluted through inefficient utilization of the results. The handicap resulting from a hearing disability is more extensive than it need be, because of the ineffective use of data derived. This problem is reinforced by available statistical evidence of a mounting number of hearing defects among children affected by the 1963-64 epidemic of maternal rubella.

Educational Diagnosis

The extension of identification and medical diagnosis into an effective educational program requires not only educational diagnosis premised upon degree of hearing loss, but also upon the total behavior and functioning of the child with the hearing loss.

Recognizing the identified difficulties in educating the hearing impaired, including the often slow and arduous process involved in communicating ideas in contrast to concrete objects, in developing essential perceptiveness and conceptualization, a diagnostic teaching service within a school system or a regional center offers hope for substantial benefit.

The concept of diagnostic teaching is based upon the assumption that teaching includes comparable procedures and sequences found in other diagnostic procedures and is in essence an extension of the diagnostic premise. Under this provision, children are placed in one or more controlled learning situations and taught for a period of time. The diagnostic teacher studies: a) the child's application of learning strategies and cognitive abilities; b) his approach to learning situations; c) the manner in which he receives and processes information; d) the success with which he learns under different conditions and teaching techniques. The objectives of such an approach are to determine: a) the nature and severity of specific learning and behavioral disorders, and b) the amenability of the child's problems to remediation through exploratory teaching. This approach should eliminate the need for either teacher or child struggling through months and years of trial and error education. Once the educational diagnosis is made, the basis for education is individually established. Educational diagnosis, however, is based upon evaluation by a team of specialists, including the educator of the deaf which establishes the parameters of the child's functioning. It is only upon sound educational diagnosis and continuing re-evaluation that a proper educational plan for each child is made. One of the common problems apparent to educators of the deaf is the limited knowledge upon which educational placement is made. A second problem is the availability of continuing re-evaluations of functioning.

Despite the logic in building an education bridge between the child and this acquisition of knowledge and personal development, teachers of hearing impaired children are not being prepared for diagnostic teaching. The curriculum and experiences necessary for the preparation of such diagnostic teachers should be studied and made available in teacher preparation programs.

Although education for the hearing impaired has been on-going for many decades, numerous unanswered questions continue despite the essential value of the answers. Among these are: What constitutes a maximum benefit sequential program for hearing impaired children? At what point in the life of a child should it begin? What is the best approach to educating a child with a progressive hearing loss? How should education be planned for the child with a fluctuating hearing loss? Recommendations have been made in these areas, but no consistent policies are in effect in local school systems or even among the states with regard to them.

A diversity of program provisions and policies pertaining to the education of hearing impaired children throughout the United States constitutes strong evidence of a need to give concerted attention to the total education process and to the philosophy underlying it. Diagnostic evaluation and placement supported by periodic critical re-evaluation and follow-up offer to education certain identifiable potential gains comparable to those already realized by other disciplines in which care and treatment are based upon routine diagnostic procedures. Such review and reassessment of need is essential as a child moves from one level to another in his school program.

Admission Criteria

Once the child with a hearing loss has been identified, placement in the appropriate educational program to meet his needs may result in movement through several schools before the best placement is determined. This is applicable particularly to children with multiple problems. Since few states have firm and consistent criteria for admission to programs for the hearing impaired and there is wide variance from program to program and from state to state, confusion in placement results. Serious and unnecessary educational retardation for already doubly handicapped children may occur. The exclusion of such children is arbitrarily made.

Comprehensive state planning, then, must provide instruction for all hearing impaired children with admission criteria for the various schools and programs within the state clearly defined, cooperatively, and realistically determined.

Premised upon the assumption of state responsibility for the education of all children, a critical need exists for each state educational agency to insure that all hearing impaired children within a given state have educational programs meeting minimally established criteria of adequacy. In order to achieve the goal of maximum benefit to each child, not only programs must be provided, but a coordination of efforts and available information must assure that the child is receiving services needed.

CONCLUSIONS AND DIRECTIONS

The deliberations here reported have not been exhaustive, but they have defined important areas for consideration in the organization and administration of day programs for hearing impaired children. Priority needs have been identified in relation to the incidence of the hearing impaired, as well as to identification, diagnosis, cooperative and coordinated programs, and essential delineations of standards and criteria for programs and staff. Attention has been directed to the broad areas of state planning and responsible authority, and a number of recommendations have evolved, including specific steps towards their implementation.

Since the Lake Mohonk Conference was the first of its kind at the national level, it was apparent from the participants' statements of the problems encountered in day programs within their own states that the plan for holding a series of four conferences on day programs for hearing impaired children was valid. The interrelatedness of the topics of subsequent conferences is outlined in the original proposal and includes: (1) Curriculum and Educational Technology; (2) Role of Parents; and (3) Inter-agency Coordination. The implementation by the states of some of the recommendations of this conference on organization and administration is contingent upon the completion of the cycle of these four conferences. The topics of the subsequent conferences are among the greatest expressed needs facing state departments of education in developing and carrying out comprehensive state plans. Certainly the development of curriculum guidelines is most pressing.

The majority of the participants indicated their willingness to provide leadership through participation in subsequent conferences. Further, many of the conferees stated that their Lake Mohonk experience would facilitate the accomplishment of the objectives of the subsequent conferences. In addition, a number of constructive suggestions for speakers and participants were made by the participants both in discussion and on the Mohonk Conference Evaluation. However, a note of urgency was voiced because of their immediate concern with the increasing number of loosely organized and inadequately staffed day programs being established throughout the country.

The lack of existing guidelines for the organization and administration of day programs recognized by the participants and by educators throughout the nation has resulted in a continuing flow of requests by leaders in a number of states for copies of the final report of the Lake Mohonk Conference.

"This Conference is a beginning," said Dr. James W. Moss in his opening remarks. He went on to say that one of the conferees' responsibilities was to "plan a course of action which gets you from your conference recommendations to some action in the field." The positive steps for state action and the 35 recommendations included in this report represent specific moves toward getting action in the field. In addition, the three additional conferences included as Recommendation 35, must be funded and conducted to complete the task — to provide the outline for action toward meeting the total needs of hearing impaired children in day programs in this country.

Appendix "A"

PRELIMINARY REPORT
ON THE
NATIONAL RESEARCH CONFERENCE ON DAY PROGRAMS FOR HEARING IMPAIRED CHILDREN

Organization and Administration

In order to disseminate the major recommendations of this conference as soon as possible, a preliminary, highly condensed report was prepared by the principal investigators and conference director on June 15, 1967. The following is the preliminary report.

PRIORITY NEEDS

- Immediate recognition of the incidence of hearing impaired children of approximately three years of age resulting from the epidemic of maternal rubella in 1963-64 and the impact of the increase in number of these children on existing school facilities, number of teachers, and parental counseling programs.

- The initiation of adequate and appropriate diagnostic and educational programs for multiply handicapped hearing impaired children as an essential responsibility of the state department of education.

- Identification of children with moderate hearing impairment presently placed in schools for the normally hearing without adequate provision for their special needs.

- Consideration of cooperative programs to avoid the inherent problems of isolated day classes which tend to be educationally inadequate.

- The establishment of an active professional organization of educators of the hearing impaired to develop standards for the professional qualifications of teachers, supervisors, and administrators.

RECOMMENDATIONS FOR STATE PLANNING

Education of all hearing impaired (hard of hearing and deaf) children is the responsibility of the state department of education and must be based on

COMPREHENSIVE STATE PLANNING

ORGANIZED on the basis of

- clearly defined goals, long range planning and legislative action
- development steps which lead toward these goals
- the support of state, regional, and local advisory boards of professionals and laymen
- coordinated efforts of regional and interstate departments of education and in cooperation with public and private health and welfare agencies
- cross funding between departments and agencies within states or across state boundaries
- length of travel time for pupils between home and school and, where necessary, include foster homes or innovative approaches to transportation
- changing demographic factors regarding pupil population types and shifts
- reassessment of the role of the residential school in relation to day programs
- availability of quality services provided by the school in the assessment, instruction, counselling and guidance of the hearing impaired from infancy through adulthood, including those with multiple handicaps
- state financial support for multiply handicapped hearing impaired children utilizing a formula for reimbursable units, one for each disability identified in a given child

SUPERVISED by a highly qualified and experienced educator of the hearing impaired at state, regional and local levels having

- the expressed authority to perform the supervisory role
- the skills requisite to relating to other disciplines
- the leadership qualities to recognize, initiate, develop and implement programs to meet the needs indigenous to the state, regional or local community
- the competencies to develop in-service programs for teaching, supervisory and other personnel with particular focus on diagnostic teaching

RECOMMENDATIONS FOR EDUCATIONAL PLANNING

The state educational program for hearing impaired (hard of hearing and deaf) children is the responsibility of the state department of education and the state coordinator of the hearing impaired and should be based on

COORDINATION BETWEEN DISCIPLINES

- prompt identification of hearing impaired infants, including neonates
- maintenance of a central registry of hearing impaired children
- development of educational programs for child and parents under the supervision of educators of the hearing impaired and without legal restriction as to minimal age
- diagnosis by an inter-disciplinary team to include the otologist, audiologist, psychologist, pediatrician, ophthalmologist and the educator of the hearing impaired
- current evaluation of available facilities as well as evaluation of the child in the placement decision
- use of data processing to ensure current medical, audiological, psychological and educational information on each child
- development of an individual diagnostic profile on each child indicating his reception, processing and expressive capacities
- mandatory, periodic re-evaluation of all hearing impaired children at significant maturational and educational stages to ensure appropriate educational placement
- appropriate supportive services to assure successful integration in schools for normally hearing; i.e., curriculum selection, teacher selection and orientation, tutoring, student counseling, and parent participation
- otologic, audiologic, pediatric and ophthalmologic examinations at least biennially
- indoctrination of general educators, including school principals, in the techniques of managing children with hearing problems, including those with intermittant as well as more stable hearing losses
- admission, release and transfer criteria taken no more than six months prior to the assessment date
- parental participation in the educational placement decision following realistic appraisal of the child's potential by the professional diagnostic team

Appendix "B"

PROGRAM

WEDNESDAY, MAY 10

9:00 p.m. Registration / Buffet Supper .... Room 61

10:00 p.m. Meeting of Work Group Leaders

THURSDAY, MAY 11

8:45 a.m. PLENARY SESSION I..ANN M. MULHOLLAND, *Chairman*

A. G. Bell Association Interest in Day Programs .... GEORGE W. FELLENDORF

Conference Background .... ELEANOR R. VORCE

United States Office of Education Interest in Guidelines for Day Programs .... JAMES M. MOSS, Ph.D.

Program and Organization .... HARRIET L. HASKINS

9:30 a.m. The Day Program Movement in the Education of the Hearing Impaired .... ANN M. MULHOLLAND

9:50 a.m. Coffee Break

10:00 a.m. Problem #1 Organizing and Administering an Adequate Day Program as Seen from State and Local Levels .... CHARLES W. WATSON

Problem #2 Demographic and Economic Base Criteria .... JAMES C. CHALFANT, Ed.D.

10:45 a.m. DISCUSSION GROUPS
Discussion: Problems #1 and #2

1:00 p.m. Luncheon

2:00 p.m. PLENARY SESSION II..ANN M. MULHOLLAND, *Chairman*

Problem #3 Supervision at State and Local Levels .... HAZEL BOTHWELL

Problem #4 Classroom Teachers' Need for Supervision .... EVELYN M. STAHLEM

3:00-4:30 p.m. DISCUSSION GROUPS
Discussion: Problems #3 and #4

5:30 p.m. Pre-Dinner Social .... Room 61

6:30 p.m. Dinner

8:00 p.m. PLENARY SESSION III
GEORGE W. FELLENDORF, *Chairman*

Reports on Problems #1-4 and Discussion by Participants .... *Group Chairmen*

FRIDAY, MAY 12

9:00 a.m.	PLENARY SESSION IV....Harriet L. Haskins, *Chairman* Problem #5 Screening for Early Identification of Hearing Impaired Children ....Janet Hardy, M.D. Problem #6 Diagnostic Evaluation and Recommendation for Placement....D. Robert Frisina, Ph.D.
9:50 a.m.	Coffee Break
10:00 a.m.	DISCUSSION GROUPS Discussion: Problems #5 and #6
12:30 p.m.	Luncheon
1:30 p.m.	PLENARY SESSION V George W. Fellendorf, *Chairman* Problem #7 Admission Criteria ....June Miller, Ed.D. Problem #8 Coordination with Other Specialists in the Public School Program ....Mamie Jo Jones, Ph.D.
2:30-4:30 p.m.	DISCUSSION GROUPS Discussion: Problems #7 and #8
5:30 p.m.	Pre-Dinner Social ....Room 61
6:30 p.m.	Dinner
7:30 p.m.	PLENARY SESSION VI Ann M. Mulholland, *Chairman* Reports on Problems #5-8 ....*Group Chairmen* Panel Discussion ....Leo E. Connor, Ed.D., *Moderator*

SATURDAY, MAY 13

8:45 a.m.	PLENARY SESSION VII Ann M. Mulholland, *Chairman* Presentation of Problem #9 ....Leo E. Connor, Ed.D.
9:15-10:15 a.m.	DISCUSSION GROUPS Discussion: Problem #9
11:00 a.m.	PLENARY SESSION VIII Ann M. Mulholland, *Chairman* Conference Summary ....Harriet G. Kopp, Ph.D. Presentation of Dissemination Plans ....Harriet L. Haskins
12:30 p.m.	Luncheon
1:30 p.m.	Adjournment

Appendix "C"

CONFERENCE PARTICIPANTS

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George W. Fellendorf	Co-Principal Investigator
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Appendix "D"

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